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ABSTRACT

The retrospective case study presented is part of a research project undertaken to determine ways in which developing nations can best allocate resources to education in light of their social and economic levels. Past socioeconomic trends in Sri Lanka and its economy in the 1970's are considered first. The case study then moves into descriptions of the educational system of Sri Lanka in the 1960's, the new educational system of the 1970's, and estimates of the cost and financing of education in the 1970's. Since the government of Sri Lanka has already formulated an educational plan and made budget forecasts for education to 1980, the author attempts to discover if the financing forecasts were consistent with the new policy officially defined. He also analyzes the various alternatives calculated either to provide new resources or reduce expenditures if the financial requirements forecast turns out to be too low. The appendixes contain useful statistical data on education in and the economy of Sri Lanka. (Author/DN)

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Financing educational systems: country case studies 1

Financing and educational policy in Sri Lanka (Ceylon)

Jacques Hallak

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J. Hallak

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Aims and methodology of the IIEP research project on financing educational systems

This research project, launched by the International Institute for Educational Planning early in 1970, originated in an enquiry as to the real possibility of the developing countries financing their educational objectives in the course of the United Nations Second Development Decade, bearing in mind the high level of expenditure that has already been reached in most cases, the constant rise in unit costs, and the increasing competition within the state budgets themselves that education will probably encounter in the future from the financing of productive investments, debt servicing, and other predictable expenditures.

Viewed in this light, therefore, the research is not strictly limited to the study of financing techniques, but has wider aims:

1. To explore the real weight of probable financial constraints on the development of educational systems up to 1980.
2. To study the various financing methods likely to augment resources, and to define a strategy of educational financing more closely adapted to social and economic realities.
3. To analyse certain alternative solutions (new structures, new technologies, etc.) capable, by reducing costs or improving the efficiency of the teaching process, of leading to a better balance between educational targets and the resources available for them.

In addition to these extremely concrete objectives, concerned with the real problems facing educational planners in all countries, the collation of the essential data should provide the basis for the answers to more theoretical questions, affecting, for example, the type of correlation between educational expenditure and the level of development, between the level of expenditure and the method of financing, between the level of unit costs and the development of the educational system, etc.

With these aims in mind, two types of study are being undertaken:

1. *National case studies* for the *retrospective* (1961-70) and *prospective* (1980 or beyond) analysis of the expenditure, financing and costs of educational systems in the widest and most representative possible sample of countries--at least fifteen; these studies should, as already stated, reveal both the magnitude and the nature of the financial constraints to be expected in the general framework

of the development of the economy and of the finances of the state, and the level and various alternative forms for the possible development of educational systems. These studies will thus cover the whole field of educational financing, costs, and policies in each country concerned.

2. *Specific case studies* covering, first, the different possible methods of financing (centralised, decentralised, public, private, etc.) and, especially, original ways of raising supplementary resources, and, secondly, the study of new educational solutions calculated to reduce costs.

These studies are being carried out in Member States by the IIEP in close collaboration with national specialists, either from government departments or from universities; in many cases the research is a concerted effort by the IIEP and the country concerned, for the common benefit of both parties and of the international community as a whole.

This project will continue until 1973, and will culminate in a synthesis report summing up the findings relating to all the problems posed. A number of the studies have already been completed, however, and instead of presenting them in a single volume it has been decided to publish them as single monographs in a new collection, *Financing educational systems*, comprising two series, one of country case studies and one of specific case studies. The synthesis report will be published early in 1974.

The financial outlay for the implementation of this ambitious project could not be provided from Unesco's basic grant to the Institute. The IIEP is deeply grateful to the Member States and various organisations who, by their voluntary contributions, have enabled it to launch and pursue this research: in particular to SIDA (Swedish International Development Authority), NORAD (Norwegian Agency for International Development), DANIDA (Danish International Development Agency), CIDA (Canadian International Development Agency), the Republic of Ireland, and the Ford Foundation. The Institute is also deeply indebted to the Member States and national specialists in various parts of the world who have agreed to co-operate with the IIEP in carrying out these studies. The publication by the IIEP of certain studies by outside consultants does not necessarily imply, however, the Institute's agreement with all the opinions expressed in them.

Preface

This case study by Jacques Hallak on financing and educational policy in Sri Lanka deals with a country in which, in the light of its still modest level of economic development ($134 *per capita* in 1960, $160 in 1970) and the pattern of its labour force, which is still characteristic of under-development (73 per cent of workers are in the agricultural sector), the education system is quite exceptionally developed.

In 1969 the apparent enrolment ratio in first-level schools in Sri Lanka (grades 1 to 8) reached 89 per cent; it was still as high as 55 per cent in grades 9 and 10 (Junior second level) and then fell to 9.7 per cent in grades 11 and 12 (Senior second level), which at that date completed secondary studies.

The growth of the school population recorded since the 1945 reform has resulted in a progressive development of the literacy ratio in the population as a whole;[1] 58.8 per cent in 1946, 71.9 per cent in 1963. In 1969/70 only 16 per cent of the labour force had never been to school, and this rate fell to 5 per cent for the 15-24 age groups.[2] Sri Lanka is therefore one of the countries which are moving, in an already foreseeable future, towards the abolition of illiteracy through the schooling of young people.

The author also brings out the fact that it has been possible to achieve this development of schooling without inflating the corresponding expenditure; on the contrary, the share of education in the national budget (16.2 per cent in 1959/1960, 13.2 per cent in 1970/1971) and in the GNP (4.4 per cent in 1960, 4.2 per cent in 1970) has tended to fall, owing both to a certain slowing down in the rate of growth in enrolments and to increasing difficulties in financing.

These originate in the increasing difficulties which have affected the Sri Lanka economy for some years past. Two major facts emerge from all the elements of this crisis analysed by Jacques Hallak. The growth rate of the economy in the 1960s (4.9 per cent on average) was not enough to ensure full employment

1. Population over the age of 5.
2. Tables 9 and 10 in Appendix II (page 147).

for a rapidly growing population (9.9 million in 1960, 12.5 million in 1970); the percentage of unemployed among the population of working age rose from 10 per cent in 1959 to 14.5 per cent in 1970, and unemployment particularly affects young people of 15 to 24 (unemployment rate 82 per cent).[1] Secondly, the balance of payments was dangerously out of equilibrium at the end of the 1960s; external debt servicing corresponded to 33 per cent of exports in 1970, compared with 7.2 per cent in 1966.[2]

The Sri Lanka economic plan 1972-76 therefore provides for a whole series of measures designed to restore the situation and to try to maintain growth at a rate of 6 per cent per annum.

Among these measures an increase in capital investments, designed to increase the number of new jobs, obviously has high priority, but it comes up against the disequilibrium in the balance of payments and the already too high burden of external indebtedness, internal saving, including public saving (budget appropriations) must therefore be more effectively mobilised. Applying the strategy recommended by the United Nations to attain the growth targets set for the Second Development Decade, the Sri Lanka planners have felt it necessary to give priority to public capital investment over public current expenditure, including educational expenditure. For these reasons, according to the plan forecasts, State expenditure on education in 1980 should not exceed 700 million rupees, compared with 472.4 million in 1969/1970 and 510.9 million in 1971/1972.[3] In other words, the rate of increase in educational expenditure during the present decade should be slower than in the past.

In the light of these financial prospects, what educational policy can be followed in Sri Lanka? In principle this policy was laid down in a reform drawn up in 1971, which is already being implemented. Jacques Hallak has therefore not had to assemble for himself the elements of a possible policy but has confined himself to verifying whether, in the light of all the existing constraints, the financing forecasts were consistent with the new policy officially defined.

The new educational reform is designed to remedy defects which were highlighted by the economic, social and financial difficulties, namely, that the existing educational policy is not an effective instrument of development, and that the unemployment rate is particularly high among young people with second- and third-level education. It is equally ineffective from the point of view of its 'internal' performance; furthermore, it does not ensure equality of opportunity between children from rural areas and urban areas, etc. Radical changes have therefore been proposed.

First-level school entry age has been postponed from 5 to 6. First-level studies are limited to 5 years (grades 1 to 5), with automatic promotion from grade to grade; the first second-level cycle now covers 4 years (grades 6 to 9) but must include 'pre-vocational' training in various fields corresponding to local economic

1. Table 17, page 32.
2. Table 21, page 37.
3. Table 30, page 51.

activities. Access to this cycle will be unrestricted, so as to prepare the mass of young people for productive activities. This is the major factor in increased expenditure.

Access to other levels (senior second level, technical schools and third-level education) is to be determined solely in the light of the need for middle-level and senior executives; the likelihood of an expansion of enrolments is therefore fairly small.

The implementation of this reform involves drawing up a new school map, organizing workshops and practical work in lower second-level schools, the corresponding training of teaching staff, etc. Assuming that these difficulties are overcome, Jacques Hallak concentrates his study on the foreseeable cost of the new education system in 1980, by which date it may be expected to have reached 'cruising speed', and on the possibilities of financing it.

In this connexion the estimates of expenditure adopted by the Sri Lanka planners for the year 1980 seem too low, and the author analyses the various alternatives calculated either to provide new resources—particularly from the local authorities, enterprises and families—or to reduce expenditure—alternatives among which a choice will, indeed, have to be made.

The first version of this country case study dates from 1970. Jacques Hallak, in his first exploration of the future of the education system in Sri Lanka, took as his basis the programme of the new majority elected in 1970; on this assumption the financial difficulties seemed insuperable. The author has revised his study in the light of the new educational policy subsequently formulated. He shows quite clearly that, from the financial point of view alone, the future of the reform is by no means guaranteed and that its implementation will necessitate a certain number of difficult choices.

Not all the lessons which can be drawn from this study are contained in the conclusions. In particular, those concerning the relations between the level of enrolments, the level of expenditure and the level of unit costs, can be formulated only in the consolidated comparison which the IIEP will draw up when all the country case studies are completed.

Meanwhile, Jacques Hallak's work throws considerable light on the mechanism of the interrelations between economic and social factors, financial possibilities and educational policy in Sri Lanka. In this context, for insurmountable economic reasons, it can be seen how slender, not to say non-existent, in this country seems the possibility of renovating an educational system based on a technology for which the material elements have to be imported. At the same time, in the plan perspective of the Sri Lanka authorities the part assigned to adult education seems very small; the reason lies, no doubt, partly in the fact that the literacy of the whole population is already well advanced, purely as a result of the schooling of young people, and partly in the priority which the country must give to the absorption into working life of adolescents, 80 per cent of whom are, as we have seen, at present unemployed.

Let us hope, with Jacques Hallak, that a selective policy for public finance combined with a strict commercial policy during the course of the 1972-76

plan will ensure the basis of Sri Lanka's long-term growth. In the immediate future, all decisions on educational policy must be made within this context.

The IIEP is grateful to the Sri Lanka authorities and national specialists for the extremely active help they were kind enough to extend to the author in the preparation of this work.

RAYMOND POIGNANT
Director, IIEP

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Introduction

It has become increasingly evident that educational systems throughout the world are being challenged from within at all levels. Students, teachers, administrators and policy-makers—to all of whom this report is addressed—are becoming more and more critical: their dissatisfaction is expressed in such statements as the following:

1. Quantitative expansion of the school system is not always a good thing.
2. Too many of the educated are encountering great difficulty in finding employment related to their ambitions.
3. The financial and human resources devoted to schooling have been expanding at an incredible rate over the past years, but will encounter increasing difficulty in maintaining this expansion in the future.
4. The inefficiency and ineffectiveness currently prevailing in formal educational institutions should be eradicated by (a) ensuring better integration of education with its socio-economic setting; (b) rethinking educational priorities in the light of other competing priorities; (c) altering the curriculum to make it more vocationally-oriented; (d) limiting the number of years of schooling at primary level; (e) offering more comprehensive common training; (f) reforming the role of the teacher and widening the teaching profession; (g) introducing mechanisms of systematic control and evaluation; etc.

In many of these respects the experience of Sri Lanka (Ceylon) during the 1960s, and the probable developments there during the 1970s, are extremely typical. A few quotations from the Five-year Plan (1972-76) will illustrate this:

> 'Since the Free Education Scheme was introduced in 1945, there has been a rapid expansion of educational facilities at all levels. Government expenditure on education increased by nearly five-fold during the course of the last two decades . . . On the part of the Government, the chief concern was to satisfy the unprecedented demand for schooling by the quantitative expansion of facilities at every stage . . . The failure, if not the inability, of the economic system to provide a meaningful and productive role for the output of the educational system has resulted in fear, frustration and despair, rather than a net increase in social satisfaction. The content of education, the curricula, syllabuses and the numbers undergoing training in the different fields of

knowledge must conform in broad outline to the country's occupation profile . . . The training, skills, the attitudes and aspiration that are the product of the educational system must be related to the socio-economic environment.'[1]

Relating education to the socio-economic environment is, however, more easily said than done; the purpose of this report is to demonstrate that there is no panacea, no short-term solution, to offer to the educational authorities of the developing world:

1. Socio-economic development is still an attractive target, though a difficult task, for poor nations—in spite of increasing disillusion among experts and economists in the industrialized countries, suggesting zero economic growth and the fight against pollution as a priority activity.
2. Finding employment for all the working-age population remains an impossible task in the immediate future, even if a very stringent development policy (including radical decisions for expanding employment opportunities and reforms to improve the educational output) is introduced.
3. In spite of rigorous cost-saving in the educational budget, by reducing the duration of schooling, reducing repetitions by means of automatic promotion, and limiting enrolments in higher-secondary and third-level education, an increasing need for finance is to be expected.
4. As the speed of economic growth increases, the potential difficulties in financing education will decrease. Nevertheless, education will still be financed principally from the public budget, and will thus have to compete with other social and economic demands, as well as with the financial requirements of the civil and military administration. It would be naive to assume that the financial constraints can be eased significantly from private sources unless strong motivation on the part of individuals can be generated by the educational authorities.
5. No educational reform, however realistic, desirable and necessary it may appear to be, can be successfully introduced without the convinced support of, and full control by, the teaching profession.

These conclusions will be supported by an examination of the conditions prevailing in Sri Lanka, as set out in the following report. It is divided into two distinct but inter-related parts.

Part I deals essentially with the main features of the economic development of the country. Section A examines the socio-economic framework, emphasizing what has challenged, and is still challenging, Sri Lanka in terms of economic development; it analyses the causes of the limited growth achievement during the past decade, by means of an examination of the economic accounts, balance of payments figures, public accounts and employment statistics. Section B deals with the future; it discusses the main features of the Five-Year Economic Plan, assesses its likely feasibility, and suggests a line of economic growth for Sri Lanka up to 1980.

1. Government of Ceylon, Ministry of Planning and Employment, *The Five Year Plan*, 1971.

The reader who is not particularly interested in economic problems can start directly with Part II (page 51), which is a study of educational development in Sri Lanka over a period of twenty years, from 1960 to 1980. Section C deals with the 1960s, and sections D and E with the 1970s.

More specifically, Section C studies the school system as it appears today and endeavours to assess its main features in the light of the development of education in Sri Lanka during the past ten years; Section D, on the future of education, describes the new educational plan, the recent reforms and radical changes decided by the government, and discusses their aims and practical feasibility, as well as drawing attention to numerous uncertainties.

Section E studies the financial implications of the educational reform over the next decade, estimating the costs of decisions in terms of rupees and of the human resources required. It is no easy task to assess the cost of expanding an educational system, and to predict how it will be financed, even when no significant changes are envisaged: when radical reforms are contemplated it is far more difficult. However, two sets of assumptions are made, to enable a study of alternative techniques of financing to be carried out. Some guiding principles and general conclusions for planning and decision-making that emerge from the study conclude this section.

The author owes a deep debt of gratitude to the Sri Lankan authorities in the Ministry of Education and Planning and the Central Bank, whose co-operation has been generously provided over two field visits and whose friendly criticism helped to improve the report. Special mention should be made concerning the valuable help and advice given by Dr. Udagama, Permanent Secretary, Ministry of Education, Mr. Wijemanna, Director of Planning of the Ministry of Education, Dr. Selvaratnam of the Ministry of Planning, and Mr. Alles, former Director General of Education in Ceylon and currently a member of the Unesco Secretariat. The views expressed in the pages that follow are those of the author alone, and not necessarily those of Unesco or the IIEP.

PART ONE

A. Past socio-economic trends in Sri Lanka

Before proceeding to the analysis of the educational system of the country, we would like to deal in this chapter with the socio-economic setting of Sri Lanka during the past decade. We will do so by describing the path of development of the country, analysing the conditions of socio-economic growth and discussing the price paid by Sri Lanka for this growth.

1. The path of development

Since the mid-1950s Sri Lanka had been going through a process of profound social and economic change. Its beginning was marked by the victory in the 1956 general election of the Sri Lanka Freedom Party, which constituted the first step towards eliminating the social, cultural, political and economic features of colonial rule.

Social reform dominated the period 1956-65. It led to the introduction of Sinhala as an official language and strong expansion of the educational system with greater emphasis on Sri Lanka culture. It involved several programmes to reduce inequality of income and provide every Sri Lanka citizen with a minimum standard of living. Specifically, it meant sharp increases in taxes, particularly on imports and on the higher income group; the continuation of a policy of price control and subsidies on a very big scale, especially on rice; and increased public expenditure on free or heavily-subsidized public services. Health and pension schemes, relief for the poor, public transport and free education are significant aspects of one of the most socially advanced countries of the continent.

Thus Sri Lanka started the 1960s with several social achievements but also with numerous socio-economic constraints which have to a large extent determined the patterns observed over the past ten years.

Economic growth

The growth rate of the economy of Sri Lanka in the last decade averaged 4.5 per cent per annum; considering that the population of the country grew

at 2.3 per cent, it means that the available national product per head has increased at only 2.2 per cent per year.

However, this overall average represents a widely varying situation, depending on the particular year under consideration and the sector of the economy in question.

The lowest average growth rate prevailed during the years 1961, 1962 and 1965; the highest rates being in 1968 and 1969. Thus the trend was low in the beginning of the decade, slightly higher later, then low again in the mid-sixties, accelerating since then till the end of the sixties. The gross domestic product (GDP) *per capita* increased from 640 rupees in 1960 to 940 rupees in 1970 (see Table 1). This is a 47 per cent increase over the period.

A breakdown of GDP by sector of production shows that some sectors have performed better; others grew at a lower rate than the national average. Construction, electricity, banking, insurance and manufacturing belong to the former group, whereas agriculture (in particular for export) has grown at only one per cent per annum and belongs to the latter group. Table 2 shows how the different pattern of growth has affected the contribution of various sectors to the gross domestic product (see also Table 3 in Appendix I):

(a) At current prices, the share of the agricultural sector has declined from 37.7 per cent in 1960 to 33.6 in 1965, increased to 37.0 per cent in 1968 and decreased to 33.6 per cent in 1970. As we shall see later, this is mainly due to changes in world market prices.

(b) In constant prices, the pattern is somewhat different, though it shows the same overall decline of the share of agriculture in national production.

(c) In the case of other sectors, the only significant trend to be noted is the increase of the share of the construction sector and of banking, insurance and real estate activities.

The social dimensions

An examination of the sources of income of the government of Sri Lanka shows that the public finance system of the country is somewhat typical of its socialist orientation, as on the one hand the receipts from income taxes, though low, are not negligible, i.e. 15 per cent of the current receipts, and on the other hand an important group of public corporations exists in the country and their income goes towards financing the budget. Over the period 1961/62 to 1970/71 the gross receipts of trading enterprises represented almost three thousand million rupees (see Tables 3 and 4).

Similarly, an analysis of the government's current expenditures by function illustrates the enormous share taken up by social services, etc. (see Table 3). From 1961/62 to 1969/70 total current government payments increased by 68 per cent, while expenditures on education and health increased by 75 per cent.

From 1959 to 1970 expenditure on education increased from 227.5 million rupees to 472.4 million rupees; health services were costing nearly 235 million

TABLE 1. Growth rate of GDP

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Index of GDP at current prices	100.0	100.0	100.5	108.0	115.5	118.0	122.0	131.0	155.5	171.5	185.0
Index of GDP at constant prices	100.0	102.0	106.5	110.0	116.8	119.5	124.0	130.5	140.5	148.0	154.5
Total population (thousands)	9 896	10 168	10 443	10 646	10 903	11 164	11 440	11 703	11 992	12 252	12 514
GDP per head: (current prices) in national currency	640	644	656	688	688	693	677	711	823	886	940
in US $ [1]	134.0	135.0	138.0	144.5	144.5	145.5	142.0	149.0	140.0	151.0	160.0
Index of GDP per head (national average)	100.0	100.5	102.5	107.5	107.5	108.5	106.0	110.0	128.5	135.5	147.0

1. Rate of exchange: Prior to November 1967: $1 = 4.76 rupees. Since November 1967: $1 = 5.95 rupees.

SOURCE Central Bank of Ceylon.

TABLE 2. GDP at constant factor cost prices (percentages)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1. Agriculture, forestry, hunting and fishing	38.5	40.4	39.9	40.9	39.8	36.6	35.9	37.1	36.5	34.9	34.7
2. Mining and quarrying	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.6	0.6
3. Manufacturing	11.5	11.5	11.8	12.3	12.2	12.4	12.8	12.7	13.0	13.4	11.6
4. Construction	4.4	4.1	4.2	3.9	3.8	3.5	3.7	4.2	5.0	5.5	6.1
5. Electricity, gas, water and sanitary services	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6. Transport, storage and communications	9.2	8.7	9.0	8.5	8.7	9.8	10.1	9.4	9.3	9.6	9.3
7. Wholesale and retail trade	14.7	13.0	13.2	13.6	13.6	14.6	14.5	14.5	14.1	14.6	14.2
8. Banking, insurance and real estate	0.8	0.9	0.9	1.0	1.0	1.2	1.1	1.2	1.2	1.2	1.2
9. Ownership of dwellings	3.3	3.5	3.5	3.3	3.4	3.6	3.5	3.2	3.1	3.1	3.1
10. Public administration and defence	5.0	5.0	5.1	5.3	4.9	4.9	5.0	4.7	4.9	4.7	4.7
11. Services	11.9	12.1	11.8	11.7	12.0	12.7	12.6	12.4	12.4	12.1	12.1
Gross domestic product [1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. Totals differ due to rounding.

SOURCE Central Bank of Ceylon, *Annual Report, 1970*, Colombo, 1971.

TABLE 3. Payments by the government of Sri Lanka (millions of rupees)

Payments	1961-62	1965-66	1969-70 (provisional)	1970-71 (estimate)
Current payments	1 693.7	1 996.8	2 849.8 [1]	3 009.3 [1]
Purchase of goods and services	994.2	1 129.0	1 527.8	1 597.2
Administration	256.3	279.3	410.4	429.6
Social services	431.1	499.0	732.9	752.1
(of which Education)	(271.0)	(324.5)	(472.4)	(484.6)
Economic services	86.2	98.6	130.3	161.0
Gross payments of trading enterprises	217.5	248.6	249.9	250.0
Intra-governmental payments	3.1	3.5	4.3	4.5
Transfer payments	699.5	867.8	1 281.1	1 372.6
Capital payments	553.9	589.7	883.1	1 194.5 [1]
Acquisition, etc., of real assets	335.8	365.3	518.0	784.5
Civil administration	6.1	7.7	19.4	18.8
Social services	85.2	58.7	120.6	202.6
(of which Education)	(27.5)	(22.0)	(40.1)	(68.2)
Economic services	244.5	289.9	387.0	548.8
Capital transfers	130.8	189.3	319.5	357.7
Acquisition of financial assets	87.3	35.1	45.6	52.3
Net payment in advance	20.8	22.7	194.6	1.9
TOTAL PAYMENTS	2 268.4	2 609.0	3 927.9	4 205.7

1. Including FEEC expenditure (not detailed).
SOURCE Central Bank of Ceylon, op. cit.

TABLE 4. Receipts of the government of Sri Lanka (millions of rupees)

Receipts	1961-62	1965-66	1969-70 (provisional)	1970-71 (estimate)
Current receipts: including	1 776.0	2 011.1	2 937.3	2 968.0
Charges and sales	43.2	70.7	54.4	70.1
Personal and corporate income taxes	285.3	277.6	441.1	425.0
Production and expenditure taxes	1 170.9	1 309.0	2 048.9	2 042.1
General sales and turnover taxes	9.5	40.9	247.4	293.8
Selective sales taxes	143.6	172.7	275.8	300.8
Import duties	465.0	476.9	306.5	288.0
Receipts from sale of FEECs	—	—	446.0	457.0
Export duties	223.2	220.6	327.2	331.8
Surplus of government monopolies	72.0	118.0	124.4	150.0
Receipts from food sales	191.6	210.0	259.1	155.3
Gross receipts from trading enterprises	234.6	301.4	283.6	302.7
Capital receipts: of which	492.4	597.9	990.6	993.7
Transfers from domestic sectors	32.2	23.4	29.2	31.3
Repayment of loans and advances	3.8	8.5	25.5	30.9
Direct borrowing	478.3	606.9	905.0	931.5
(of which Abroad)	(34.8)	(76.5)	(163.7)	(490.9)
Decline in cash balance, etc.	−40.2	−82.4	−25.6	—
TOTAL RECEIPTS	2 268.4	2 609.0	3 927.9	3 961.7

NOTE More complete versions of these tables are given in Appendix I, Tables 6 and 7.
SOURCE Central Bank of Ceylon, op. cit.

rupees in 1970; special welfare services had more than trebled and the cost of food subsidies had quadrupled, thus taking up more than one fifth of the total current payments of the government in 1970.

Obviously, this development of the government's effort in the social sector has not been entirely steady over the past decade. In some years the social budget has been stagnant if not slightly declining; in other years the rate of growth has been extremely high. However, on the whole and on average, the total of the 'social services' budget and the cost of food subsidies has been growing at the rate of 9 per cent per annum over the past eleven years, and represented 47 per cent of the total government payment in 1970. This indicates a significantly important (or at least expensive) social budget for a country of the size and at the standard of development of Sri Lanka, especially with the pattern of economic growth observed over the same period.

It is therefore necessary to understand the conditions of the socio-economic growth of the country, in order to be in a position to evaluate the performance achieved in relation to the cost.

2. Conditions of development and economic features of the country

These are numerous and it is difficult within the scope of this study to analyse them all. This section will therefore deal with what seem to be the most important characteristics of the economy of the island. They are: (a) the role of agriculture; (b) the dependence on imports; (c) the level of saving; (d) the low productivity; and (e) most important of all, the population trend.

The role of agriculture

To understand the economic problems of Sri Lanka, one should keep in mind that this country remains predominantly dependent on agriculture in spite of a continuous policy to expand the other sectors of production over the past ten to fifteen years.

Three figures summarize very clearly what role is really played by agriculture in the country: 73.5 per cent of all employees registered in 1968 were working in agriculture; 37 per cent of the gross national product (GNP) came from agriculture; more than 90 per cent of the export receipts are due to three agricultural products (tea, coconut and rubber). (See Table 5.)

Table 6 illustrates the trend of production of the main agricultural products over the period 1960 to 1970. Tea, which is one of the major exports of the country, increased its production from 435 million lbs. to 503 million lbs. in 1965 and then declined to 468 million lbs.[1] in 1970. This is an increase of less than one per cent per annum. Coconut, another major export, has increased

1. 1 pound (lb.) = 0.45 kg.

TABLE 5. Composition of exports, 1966-70 (millions of rupees)

	1966		1967		1968		1969		1970	
Products	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Tea	1 027	60.0	1 061	63.0	1 162	57.0	1 062	55.0	1 120	55.0
Rubber	337	20.0	282	17.0	331	16.0	431	23.0	440	21.0
Coconut products	196	12.0	167	10.0	331	16.0	221	12.0	237	12.0
Other	116	7.0	121	7.0	152	8.0	161	8.0	198	10.0
Receipts	24	1.0	59	3.0	60	3.0	41	2.0	38	2.0
TOTAL [1]	1 700	100.0	1 690	100.0	2 036	100.0	1 916	100.0	2 033	100.0

1. Totals differ due to rounding.

SOURCE Central Bank of Ceylon, op. cit.

TABLE 6. Production by volume of main agricultural products marketed, 1960-70

Products	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	Growth rate 1960-70 (percentage)
Tea (millions lbs.)	435.0	455.0	467.0	485.0	482.0	503.0	490.0	487.0	496.0	484.0	468.0	7.5
Rubber (m. lbs.)	218.0	215.0	229.0	231.0	246.0	281.0	289.0	316.0	328.0	333.0	351.0	61.0
Coconut (net equivalent)	2 183.0	2 601.0	2 811.0	2 549.0	2 991.0	2 676.0	2 461.0	2 416.0	2 601.0	2 440.0	2 447.0	12.0
Rice (m. of bushels)	43.1	43.2	48.1	49.2	50.5	36.3	45.7	55.1	64.6	65.9	76.8	78.0

by just about one per cent. Only rubber production has expanded at an average rate equivalent to the gross domestic product.

It is therefore only to be expected that the socio-economic conditions of Sri Lanka will be very sensitive to any change in the agricultural sector.

For example, despite a high growth rate in the manufacturing sector (annual average 6.7 per cent) over the past decade, GNP has grown at a rate of only 4.5 per cent because agriculture, the largest contributor, registered a growth rate of only 3 per cent.

Similarly, the deteriorating prices in the world markets for the three major crops exported by Sri Lanka have been contributing to a significant decline in foreign exchange earnings and therefore to the import capacity of the economy and finally to its potential growth. It has been estimated that all increases in foreign aid observed during the 1960s were far outweighed by losses due to price movements in world markets. This was especially the case for tea exports, which represent 60 per cent of all exports. According to Central Bank statistics the price index (1967 = 100) was 120 in 1960, which means that for the same volume of exports a net loss of 20 per cent of revenue took place.

In the case of rubber (see Table 7) the export prices have declined so sharply that it almost outweighed the effects of the increase in production. Only for coconut products did some improvement take place during the past four years.

TABLE 7. Index of price trend of principal export products 1960-70, (1967 = 100)

Products	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Tea	120	117	114	112	113	110	105	100	114	108	110
Rubber	169	136	135	127	119	118	116	100	104	141	128
Coconut	102	79	81	89	94	120	108	100	163	137	150

SOURCE Central Bank of Ceylon.

In actual fact, during the last decade, Sri Lanka had to make a strenuous effort to maintain the export income levels of the past and little progress has been made in diversification of agricultural export products.

Dependence on imports

Another major weakness of the economy is its very high dependence on imports. Here again, a few figures illustrate the importance of the phenomenon and the significance of the changes which have occurred over the past decade. (See Table 8.)[1]

1. See also Table 9 in Appendix I.

TABLE 8. Composition of imports, 1960-70 (millions of rupees)

	1966		1967		1968		1969		1970	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Consumer goods	1 161	57.2	931	53.6	1 147	52.8	1 218	47.9	1 294	55.9
Intermediate goods	470	23.2	441	25.4	629	29.0	592	23.3	451	19.5
Investment goods	361	17.8	330	19.0	383	17.6	700	27.5	546	23.6
Miscellaneous	36	1.8	36	2.1	14	0.6	33	1.3	22	1.0
TOTAL	2 028	100.0	1 738	100.0	2 173	100.0	2 543	100.0	2 313	100.0

SOURCE Central Bank of Ceylon.

Over the last five years total imports have increased by 19 per cent. But imports of investment goods have increased by 51 per cent. The share of consumer and intermediate goods has declined from 57.2 per cent to 55 per cent, and from 23.2 per cent to 19 per cent respectively. Thus, in spite of the significant change in the composition of imports, the share of consumer goods remains very high—imports of food and drink alone represented over 46 per cent of total imports in 1970. A different way of assessing the part played by imports in national production is to examine the 'import content' of consumption and investment.

In 1963, for each 100 rupees spent by households for consumption 25 rupees were spent on imported goods, and for each 100 rupees spent on investment 26 rupees were paid for imports. This means that the economy of the country was very heavily dependent on imports, even for consumption. Sri Lanka has therefore had to devote a very large proportion of its export revenue to its consumption. If the revenue from exports is declining or uncertain, then the investment effort is going to suffer a great deal because of the lack of foreign exchange, and consequently the path of growth of the economy would be slowed down. This is really what happened over the period 1963-65, when the gross fixed capital formation (GFCF) declined from 15.8 per cent to 12.9 per cent of GDP, and the annual rate of growth to 4 per cent.

To fight against this weakness the government has followed a policy of substitution of imports by locally produced goods. This was particularly true for rice, one of the major items imported. The volume of production of rice increased by 78 per cent over the period 1960-70. This was also true for other goods. In addition, import duties on finished products were introduced, some products were brought under quota control, and a few others were banned outright except with special authorization. On the whole, some achievements have been observed and if one analyses the direct import content of private consumption and of investment in 1970 one will notice that out of 100 rupees spent by households 11.5 rupees were related to imports. In the case of investment, 27.2 per cent of expenditure covered imported goods. This is in some respects much better than the situation at the beginning of the decade.

However, in spite of these encouraging results, Sri Lanka is starting the 1970s with a continuing heavy reliance on imports, and because of its limited capacity of imports—as we shall see later—its investment effort will be very difficult to finance unless a significant domestic saving is made.

The low level of saving

But unfortunately, one of the striking characteristics of the country is that there has been no appreciable increase in the rate of saving during the past ten years. As the Minister of Finance wrote: 'The economy has failed to set aside from current income resources adequate to generate a growth commensurate with the expectations and aspirations of the community for economic well-being. Here, we have a community desirous of living better but not providing the

economy with enough saving to accelerate the pace of economic development, which is a pre-requisite for the fulfilment of its desires . . .'[1]

In actual fact, the domestic saving ratio[2] was 12.8 per cent in 1961 and 15.9 per cent in 1970 (see Table 9). The average rate over the period was only 12.9 per cent.[3] The results of this are serious, as Table 10 shows.

Since 1960, a strict policy trying to limit private and public consumption has been more or less successful to the extent that public consumption has declined from 75.3 per cent of GDP in the beginning of the decade down to 70 per cent in 1970, and the share of public consumption (after having increased

TABLE 9. Trend of saving rate, 1960-70 (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Domestic saving	656	860	1 004	932	925	975	902	1 101	1 638	1 681	2 003
GNP	6 637	6 698	6 993	7 282	7 775	8 013	8 334	9 018	10 596	11 565	12 597
Rate of domestic saving	9.9	12.8	14.3	12.8	12.0	12.1	10.8	12.2	15.4	14.5	15.9

SOURCE IIEP estimate based on Central Bank statistics.

TABLE 10. Percentage of GDP (results of the last ten years at current prices), 1960-70 [1]

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Private consumption	75.3	71.4	71.8	72.3	73.8	72.7	75.3	73.4	73.2	73.7	70.0
Public consumption	13.6	13.5	14.0	13.7	14.0	14.3	13.9	13.6	13.6	12.9	12.9
GFCF	15.3	15.1	15.8	14.8	14.4	12.9	14.2	15.0	15.2	18.5	18.4
Exports	28.7	27.7	28.3	25.8	24.8	25.9	22.4	20.3	21.0	18.8	17.5
Imports	−32.3	−28.7	−29.7	−27.5	−27.0	−25.5	−25.8	−23.2	−24.0	−25.2	−20.0
GDP	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. The total is not correct due to rounding and to adjustments in stock.

SOURCE IIEP estimate based on Central Bank statistics.

1. 'The economics of Ceylon: trends and prospects', presented by the Hon. Dr. N. M. Perera, M.P., Minister of Finance, 10 November 1971.
2. i.e., the ratio of domestic saving (GNP less consumption) to GNP.
3. This low and quite stagnant rate of saving can be explained to a large extent by the low income households who are unable to save while their resources are insufficient to pay for adequate quantities of food. In this respect, Sri Lanka is no exception among the poorer countries.

from 13.6 per cent in 1960 to 14.3 per cent in 1965) has been drastically limited to 12.9 per cent of GDP at the end of the decade. Thus the government has succeeded in encouraging investments at the expense of consumption, and the share of investment increased to 18.4 per cent in 1970 (from 12.9 per cent in 1965). This investment effort could not be financed entirely by domestic saving as the saving ratio has remained low and the country has to draw heavily on capital from abroad. (See Table 11.)

This explains the very difficult position of the country in terms of foreign reserves, as we shall see in the following sections.

TABLE 11. Capital account of the nation, 1960-70 (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Capital formation											
Gross fixed capital formation	1 022	1 037	1 101	1 095	1 120	1 043	1 187	1 366	1 568	2 276	2 355
Variations in stocks	−44	+64	−20	+65	−7	−30	+8	+11	+100	−23	+137
Variations in external assets	−193	−10	−28	−42	−111	+89	−122	+131	+14	−86	+26
TOTAL	785	1 091	1 053	1 118	1 002	1 102	1 073	1 508	1 682	2 167	2 518
Domestic savings	656	860	1 004	932	125	975	902	1 101	1 638	1 681	2 003
Net external resources	129	231	49	186	0	127	171	407	44	486	515

SOURCE IIEP estimate based on Central Bank statistics.

The low productivity

Not only did Sri Lanka appear to be living 'beyond its means' by borrowing heavily from abroad to finance its investments, but more seriously, the productivity of these investments has been disappointingly low.

According to some estimates, the return of public investments in industry, trading and service corporations has been as low as 2.4 per cent (after tax).

To understand the importance of this observation it is appropriate to note that the leading role in development falls upon the public sector, which is fast emerging as the largest investor. (See Table 12.)

In actual fact, the total investment outside the private sector has increased from about 400 million rupees in 1960 to over one thousand million in 1970 (250 per cent more). The trend was much more striking in the second half of the decade, for both public and private sectors (see Table 12). Thus low returns for investment mean inability of the public sector to generate sufficient surpluses to meet the investment requirements in that sector. When one considers

TABLE 12. Gross fixed capital formation (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Government	237.7	249.4	259.9	256.7	238.8	249.9	265.0	327.2	347.2	461.6	506.2
Public enterprises	79.4	91.7	103.7	127.3	101.8	129.8	123.8	114.8	119.2	102.4	64.0
Public corporations	88.4	77.3	88.7	94.0	151.1	149.6	220.5	187.3	277.7	562.6	437.6
Private sector	616.6	619.0	648.5	617.3	627.9	513.7	577.9	737.0	823.6	1 149.1	1 346.8
Gross domestic fixed capital formation	1 022.1	1 037.4	1 100.8	1 095.3	1 119.6	1 043.0	1 187.2	1 366.3	1 567.7	2 275.7	2 354.6

SOURCE Central Bank of Ceylon, *Annual Report, 1970*, op. cit.

TABLE 13. Trend of public indebtedness, 1960-70 (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Domestic	1 936.7	2 344.7	2 695.7	3 030.2	3 375.3	3 695.5	4 194.5	4 582.2	5 196.5	5 513.0	6 294.8
External	293.7	307.0	345.2	407.1	412.1	489.3	548.8	739.3	1 074.3	1 375.5	1 578.4
TOTAL	2 230.4	2 651.7	3 040.9	3 437.3	3 787.4	4 184.8	4 743.3	5 321.5	6 270.8	6 888.5	7 873.3

SOURCE Central Bank of Ceylon, *Annual Report, 1970*, op. cit.

that a significant part of the public investment is financed through expensive borrowing (see Table 13), one realises that the opportunity cost of such low returns is extremely high for the country.[1]

To put it differently, the low productivity level has had a major implication for the rate of the development of Sri Lanka during the last decade. The requirement for investment was much higher to achieve the same economic growth. Had the productivity rate been higher, the economy would have grown much faster with the same pattern of investment, thus contributing towards easing the present difficulties facing the country. Alternatively, the actual pattern of growth could have been achieved with less investment and therefore with less borrowing from abroad.

TABLE 14. Trend of public external indebtedness, 1969-70 (millions of rupees) [1]

	1969	1970
Servicing of public external indebtedness	71	94
As percentage of servicing external indebtedness	16.4	12.4
As percentage of total public revenue	2.0	2.4

1. See also Table 21, page 37.

SOURCE IIEP estimate based on Central Bank statistics.

The population trend

This is the key determinant of the state of the economy of Sri Lanka during the past decade and in this respect deserves special treatment, which would require development beyond the scope of the present study.[2] However, we can summarize some implications of the population trend as follows:

(a) From 1960 to 1970 a combination of a low death rate and a high birth rate has caused the total population of the country to increase from 9.9 million to 12.5 million inhabitants (or an increase of 26 per cent). Thus while the national product has increased at an average rate of 4.5 per cent per annum, the population has increased by almost half that rate (2.2 per cent). Consequently, the lion's share of the development achievement has been cancelled out by the increase in the population.

(b) Continued high birth rates result in an age structure in which there is a relatively high proportion of children. Over half the actual Sri Lanka population

1. In 1970 the cost of servicing public external indebtedness reached the enormous amount of 94 million rupees. (See Table 14.)
2. For an interesting discussion see: 'Towards a population policy for Ceylon', by S. Selvaratnam and S. A. Meegama, in the quarterly journal *Marga*, Vol I, No. 2, 1971. Hansa Publishers Ltd., Colombo.

have been born since 1950, and more than a quarter since 1960. Table 15 compares the population by age and sex in 1963 and 1968 in greater detail. The total population increased from 10,582,000 to 11,964,000. The bulk of the increase (63 per cent) resulted from the increase of the group aged 0-24, which means that this led to a 'rejuvenation' of the population pyramid. More and more, a smaller proportion of the population has to provide support to a larger number of children, who are heavy consumers. Thus a major proportion of the country's limited income is spent on feeding, clothing and educating an increasingly new generation. This enormous expenditure contributes to understanding why there is an inability in Sri Lanka to accumulate enough saving for investment in economic development.

(c) In spite of a significant increase in the food production of the country, Sri Lanka is still a food-deficit nation importing every year about 1,000 million rupees worth of essential food items from other countries. Thus it appears that increasing population has not helped to narrow the gap between domestic requirements and domestic production to an appreciable extent. On the contrary—it has led to weakening the foreign exchange position of the country

TABLE 15. Population of Sri Lanka by age and sex (thousands)

	Census 1963			1968[1]		
Age group	Total [2]	Male	Female	Total [2]	Males	Females
All ages	10 582	5 499	5 083	11 964	6 216	5 748
0-4	1 612	816	796	1 887	957	930
5-9	1 447	731	717	1 626	821	805
10-14	1 331	681	650	1 495	764	731
15-19	1 021	518	504	1 162	589	573
20-24	886	444	441	1 006	505	501
25-29	744	376	368	846	427	419
30-34	668	353	315	760	402	358
35-39	654	343	310	741	389	352
40-44	471	259	213	536	294	242
45-49	444	247	197	504	280	224
50-54	346	194	152	393	220	173
55-59	268	155	113	304	176	128
60-64	242	139	103	275	158	117
65-69	150	84	65	170	96	74
70-74	103	56	47	117	63	54
75 and over	126	67	59	142	75	67
Age unspecificied	69	36	34	—	—	—

1. Mid-year estimates.
2. Totals differ due to rounding.

SOURCE Department of Census and Statistics, Registrar General's Department, Sri Lanka.

and limiting the capacity of the country to import investment goods badly needed for its development.

(d) In brief, the higher the rate of population growth, the greater the proportion of available capital that must be used for investment, simply to maintain social services and standard of living at the same level. This was really what happened in Sri Lanka during the past fifteen years. The country tried to produce more to feed people better. It has in effect essentially succeeded 'in feeding more people', but not so much 'in feeding people more'.

3. The costs of development

Development *per se* is meaningless. To judge the performance of a country over a period of time requires more than simply analysing the pattern and conditions of growth. A fair assessment should also include an examination of the 'price' paid by the national community in achieving its score.

In the case of Sri Lanka, the gross national product has increased at almost 5 per cent per annum while an advanced social system was consuming an increasing proportion of the public income. This pattern took place in spite of the low level of productivity, of limited effort of saving, and of a fast-growing population in an economy heavily dependent on agricultural exports. Therefore it is logical to wonder how the country has achieved such a pattern of development in spite of all these unfavourable conditions ? The country *must* have accepted, explicitly or implicitly, to make a sacrifice on some grounds. Perhaps it is prepared to pay for its development in the 1960s by serious difficulties of development in the 1970s.

An examination of the present state of the socio-economy of the country as reported in numerous official publications [1] shows that Ceylon has paid and is still paying the cost of the pattern observed during the past years. Two major illustrations can be given in this respect: (a) the employment problem and (b) the foreign exchange problem.

The employment problem

The awareness of an employment problem emerged in the country as early as 1959. An ILO labour force survey showed that 10.5 per cent of the labour force was unemployed, and the Ten-year Plan stated that 'the problem of employment is one of the key questions of relevance to planning in Ceylon'.[2]

Accordingly, a manpower planning exercise was carried out. The main conclusion was that GDP should grow at a 6 per cent rate per year over the period 1959-68, so that opportunities for employment could grow at 3.2 per cent per

1. See, in particular, Ministry of Planning and Employment, *The five-year plan, 1972-76*, Colombo. Ceylon Government Press, 1971; and Hon. Dr. N. M. Perera, M.P., *Budget speech, 1971-72*, Colombo, Ceylon Government Press. 1971
2. National Planning Council, *The ten-year plan*, Colombo, Government Press, 1959.

annum to keep pace with the expected growth of the labour force and reduce the unemployment rate to 1 per cent. Some guidelines for educational policy were drawn up in addition, emphasizing the need to 'adapt the type of training for white-collar jobs to a realistic assessment of opportunities in this field . . .'

And so on and so forth. When one compares the incisive and pertinent analysis made by the Ceylonese planners thirteen years ago with what has happened since 1959, one can conclude that it is not enough to make a good assessment and prepare wise decisions to ensure their implementation.

As it turned out, the ten-year plan perspective never did, in fact, serve as a programme for action. As Tables 16 and 17 show, the total active labour force was 3,798,000 in 1970, the majority of whom belonged to rural areas. The same year open unemployment reached 552,000, or over 14.5 per cent of the active labour force. Thus instead of declining to one per cent, the rate of unemployment rose to about 15 per cent. The 6 per cent growth target was not achieved—it was less than 5 per cent—and employment grew at a low rate—less than 2 per cent a year, against a growth in the labour force of about 2.5 per cent.[1]

TABLE 16. Active labour force, 1969/70 (thousands)

	Urban	Rural	Estate	Total
Males	504	1 917	366	2 787
Females	124	576	310	1 010
TOTAL	628	2 493	676	3 798

TABLE 17. Open unemployment by sex: urban, rural, estate, 1969/70 (thousands)

	Urban	Rural	Estate	Total
Males	78	211	36	324
Females	41	173	14	228
TOTAL	119	384	50	552
Of whom those aged 15-24	87	319	47	453
Those aged 15-24 as percentage of total unemployment	(74)	(83)	(94)	(82)

SOURCE International Labour Office, 'A programme of action for Ceylon' in *Matching employment opportunities and expectations*, Geneva, ILO, 1971.

1. P. J. Richards, 'Employment and unemployment in Ceylon' in *Development centre studies*, Paris, OECD, 1971.

There is no need to be an economist to understand that this was due to the conjunction of two factors: an extremely high increase in the total population of the country and an insufficient pattern of economic growth. As we have noted previously, these factors are correlated and belong to a vicious circle which has been developing in Sri Lanka: population explosion—limited saving and low productivity—insufficient investment—insufficient rate of growth.

Perhaps the most dramatic aspect of unemployment is when it is accompanied by social frustration and involves the youngest group of the population, which usually generates ambitious attitudes and high expectations. This was so in the case of Sri Lanka.

TABLE 18. Seeking work by education, age and sector in 1969/70 (percentage of the active labour force)

	Aged 15-19				Aged 20-24			
	U	R	E	All	U	R	E	Al
No schooling	13	11	31	23	29	8	5	8
First level	44	34	27	34	16	17	12	15
Lower second level	57	41	71	46	44	38	25	39
Passed 'O' level	87	93	—	92	45	69	—	63
Passed 'A' level	—	—	—	—	22	17	—	27
ALL	51	41	32	41	37	39	11	34

U = urban; R = rural; E = estate.

According to Table 18, the higher the level of education the higher the percentage of the active labour force seeking work. This is true with a few exceptions in rural and urban areas. Moreover, every year 130,000 students leave school after achieving grade 9 or 10 and 40,000 students after grade 11 or 12, when their chances of finding jobs are extremely low. The problems for these students are to find not only employment but also employment which corresponds to their career prospects and expectations. It is sad to observe that the economy of the country cannot absorb so many newcomers to non-manual jobs every year.

A labour force survey carried out in 1968 by the Department of Census and Statistics concluded that 'over 25 per cent of the unemployed comprised persons who had passed at least GCE 'O' level'. According to the *Five-year plan*, 'this reflected . . . the inadequacy of the educational system which geared people to desk-type occupations and discouraged initiative and enterprise, and led to a perpetual search for employee status, particularly in the government

sector'.[1] There is no doubt that education should bear some responsibility, but it would be naïve to ignore the fact that the present employment situation is—first of all—due to the insufficient growth rate of the economy.

The foreign exchange problem

To appreciate fully what the foreign exchange problem of Sri Lanka implies, it is very significant to look at the external assets situation of the country over the period 1956-70.

In 1956 the total external assets of Sri Lanka were 1,275.7 million rupees, of which 377.7 million rupees were in the hands of the government and government institutions, and 737 million at the Central Bank. In 1960 the loss was already very severe; only 541.3 million rupees remained—239.4 million rupees in the government and government institutions and 190.2 million at the Central Bank. Yet the situation was not critical. But in 1970 the total external assets decreased further to 402.6 million rupees, and the government sector had dropped to 58 million rupees. Altogether, the ratio of external assets to annual import of goods was 81 per cent in 1956, and decreased to 17.2 per cent in 1970. The picture is even worse if one notes that the total net external public debt was 144 million rupees in 1956, 222.8 million rupees in 1960 and 1,550.9 million rupees in 1970. (See Tables 19 and 20). Thus the total external debt, which represented 10.9 per cent of total foreign exchange earnings in 1960, represented in 1970 the fantastic amount of 68.5 per cent.

This means that over the past fifteen years, not only has Sri Lanka exhausted all its external assets, including foreign currency and gold reserves, but also it has borrowed heavily (sterling loans, project loans and commodity loans) to finance the annual deficit of its economy.

The question is then, how did the country arrive at such a situation ? To understand this trend, it is necessary to examine the conditions of the economy separately over the three periods 1956-60, 1961-67, and after 1967.

After 1956 the economy of the country expanded at a very fast rate. Simultaneously, the success of the malaria eradication campaign (1946-48) had its full impact on the size of the population. Altogether, a significant need for imports was observed, and average annual imports of goods and services increased from 1,950 millions of rupees over the period 1952-56 to as much as 2,250 millions of rupees per year in 1957-60. Thus the country was drawing heavily on external reserves, which were reduced by 730 million rupees in five years.

From 1961 to 1967 two major factors contributed to the deterioration of the foreign exchange position of Sri Lanka. On one hand, the terms of trade index (i.e., the ratio of export prices to import prices) declined steadily from 148 in 1960 to 100 in 1967. This means that the economy had to export 48 per cent more goods and services to obtain the same amount of imports.

1. *Five-year plan*, op. cit.

The reason is that the price of two of the major goods exported by Sri Lanka fell (20 per cent for tea and 69 per cent for rubber) when all import prices increased by 17 per cent on average. On the other hand, in spite of a very

TABLE 19. Balance of payments for 1960 and 1970 (millions of rupees)

	1960	1970
Goods and services		
Exports f.o.b.	1 796	2 011
Imports c.i.f.	−2 006	−2 336
Trade balance	−210	−325
Non-monetary gold	−2	−2
Freight and merchandise insurance	5	4
Other transportation	80	71
Passenger fares	−18	−11
Port expenditures	102	86
Other	−4	−4
Travel	−24	1
Investment income	−44	−142
Direct investment	−56	−51
Other	12	−91
Government expenditure	−14	2
Other services	−33	−62
Non-merchandise insurance	−10	−7
Other	−23	−55
TOTAL	−242	−453
Transfer payments		
Private	−31	−15
Official	53	75
TOTAL current account	−220	−393
Capital and monetary gold		
Non monetary sector	14	353
Direct investment	3	8
Other private long-term	−1	1
Other private short-term	−7	−5
Central government	19	356
Loans received	20	186
Short-term liabilities	−13	157
Assets	12	13
Monetary sector	177	29
Commercial Bank — liabilities	−2	−4
Commercial bank — assets	−10	[illegible]
Central Bank — liabilities	−1	[illegible]
Central Bank — assets	190	−29
I.M.F. account	—	−85
Special drawing rights	—	78
Monetary gold	—	—
Errors and omissions	−19	12

SOURCE Central Bank of Ceylon.

TABLE 20. Trend of external indebtedness, 1960-70

Year	Total external public debt (a)	Total foreign exchange earnings (b)	(a) as percentage of (b)
1960	222.8	2 050	10.9
1961	230.6	1 937	12.4
1962	259.1	1 992	13.0
1963	311.5	1 924	16.2
1964	373.5	1 954	19.1
1965	446.6	2 116	21.1
1966	521.1	1 885	27.6
1967	708.0	1 866	37.9
1968	1 038.3	2 231	46.5
1969	1 337.5	2 178	61.4
1970	1 550.9	2 264	68.5

SOURCE IIEP estimate based on Central Bank statistics.

severe policy of cutting imports and controlling prices, the average volume of imports, though reduced, remained high. In actual fact, the level of domestic expenditures was maintained at an artificially high level by a price-control system and a consistent social policy of food subsidies, and other measures. The direct import content was so significant that it outweighed the impact of the strong import policy. Simultaneously the volume of exports increased by only 1.7 per cent per annum. Thus the country was living beyond its means and the serious deterioration of its foreign exchange position led the government to devalue the rupee in November 1967 by 20 per cent and introduce the Foreign Exchange Entitlement Certificate scheme (FEEC).

Since 1968 the situation has not been improving. On the contrary, in 1969 and 1970 the external resource gap (the difference between the total foreign exchange earnings and total foreign exchange payments) exceeded 1,900 million rupees, i.e. almost half the country's total foreign exchange earnings. The volume of exports of tea and coconut has been decreasing, while the terms of trade have been deteriorating, i.e., 16 per cent less from 1967 to 1970. Yet the import payment increased very sharply in spite of the FEEC because of a fast increase in prices and the difficulty of applying import restrictions to some basic commodities such as food. Moreoever, the cost of the foreign debt continuously increased, to such an extent that in 1970 it reached 6 per cent of GNP and 33.4 per cent of exports (see Table 21). Furthermore, 65 per cent of the gross borrowing was devoted to the repayment and servicing of debts, especially of short-term loans. The remaining 35 per cent was insufficient to buy the essential machinery and equipment necessary for economic development. 'This

TABLE 21. Trend of servicing of external indebtedness, 1966-70

	1966	1967	1968	1969	1970
Servicing of external indebtedness — capital plus interest (millions of rupees)	135	106	293	434	757
As percentage of GNP	1.6	1.2	2.8	3.7	6.0
As percentage of exports of goods and services	7.2	5.7	13.2	20.0	33.4

SOURCE IIEP estimate based on Central Bank statistics.

is the heart of the economic crisis confronting the country' at the beginning of the new Five-year Plan.

In concluding this chapter, it is interesting to summarise the socio-economic position of Sri Lanka by listing a few findings:

(a) The population of the country has grown rapidly and is still growing too rapidly. The family planning policy which was started a few years ago has not yet had its full impact.

(b) The social progress has been remarkable: health, education, and food subsidy schemes are particularly significant yet very costly and consume a large share of the national resources.

(c) The economy has failed to generate a growth rate which would have enabled the country to provide employment to all job-seekers, or to secure better living conditions for the population, or to change significantly the structure of the country, which remains essentially agricultural.

(d) The development of education has been too fast and a considerable amount of unemployment is noted, particularly among graduates of second- and third-level education.

(e) Finally, a foreign-exchange crisis is facing the country to-day, planting its roots in the mid-1950s, but likely to determine the socio-economic prospects of Sri Lanka during the coming decade.

B. The economy of Sri Lanka in the 1970s

This chapter deals with the future of Sri Lanka's economy. The future is full of uncertainties and the risk of being too theoretical and speculative is almost unavoidable. In this case, however, some basis for being more positive is available.

A new government came into power after the elections of May 1970. Since then, the major preoccupation of the authorities has been to define a strategy for solving the economic crisis of the country described earlier in this paper.

Several studies were made and numerous discussions took place at the highest level of responsibility, including parliament and the cabinet. A Five-year Plan was prepared and published in November 1971 'in the hope that it will be read and discussed by all sections of the public'.[1]

We shall therefore use the plan as a framework for assessing the likely pattern of development of the economy in the coming years. After having introduced in Section 1 the main features of the strategy adopted by the government, we will discuss in Section 2 the foreseeable difficulties in achieving the targets of the plan and in section 3 suggest, in perspective, some trends.

1. The five-year plan

The plan covers the period 1972-76. Its preparation has been governed by two basic considerations: firstly, how to ensure a sufficient pattern of economic growth so that, in spite of the population expansion, the standard of living can be raised; secondly, how to solve the immediate and serious problems of unemployment and the balance of payments.

Theoretically, these objectives are not conflicting inasmuch as unless the foreign exchange constraints of the economy are overcome, it is not realistic to envisage long-term economic growth, and if sufficient economic growth is not achieved, it is naïve to expect enough new employment opportunities to solve the unemployment problems.

1. See Introductory Note to *Five-year plan*, op. cit.

In practice, the matter is not so easy, and to some extent long-term growth objectives for Sri Lanka are in conflict with finding immediate solutions for today's economic crisis in the country. More employment means more growth; more growth means more investment; more investment means more requirements for foreign exchange, and more difficulties in easing the balance of payment problems.

However, the Sri Lanka planners have decided wisely that the long- and short-term objectives should be reconciled, and that some fundamental changes should be made in the structure of the economy. For this purpose, a strategy has been defined as follows:

'(a) the maximum use of labour which is the resource available in abundance;
(b) an investment policy which makes the best use of the limited foreign exchange which is available;
(c) the reduction of food imports by the immediate development and diversification of agriculture;
(d) full and efficient utilization of existing industrial plant, expansion of selected industries and investments in new industrial projects on the basis of national priorities;
(e) the development of a new export sector, and
(f) the involvement of the people in the formulation and execution of development projects at the local level.' [1]

The logic behind this strategy is clear. Sri Lanka should make fuller use of its potential (labour, both educated and uneducated, equipment and industrial plant); cut imports and reduce the import content of both investment and consumption, particularly consumer foods; increase export earnings by diversifying export products.

Within this broad framework, the government decided that the economy of the country should grow by at least 6 per cent per year over the period 1972-76: agriculture would grow at 4.9 per cent per annum (paddy rice would continue to be developed to help the country produce its own needs); industry would grow at 10 per cent; construction and services at 6 per cent and 5.9 per cent respectively.

A substantial part of such an increase would be obtained from more efficient use of the existing capacities of the economy. The investment effort should however be important: it would grow from 2,490 million rupees in 1970 to 2,565 million rupees in 1972, and to 3,394 million rupees in 1976. Part of the investment would be financed by net capital inflow from abroad (1,500 million rupees over five years) and part out of domestic saving. The average saving rates would increase from 12.5 per cent in 1970 to as much as 17 per cent of national income. In spite of this rise in saving, 74 per cent of the increase in income would be left for consumption, which means that average consumption per head would still increase in spite of a decline in the proportion of GDP going to consumption.

1. *Five-year plan*, op. cit.

The government's revenue and expenditure policies will be a major element in the achievement of the plan targets. A surplus of government revenue over its current expenditure is required of about 120 million rupees in 1972, to 272 million rupees in 1976 (see Table 24). The balance of payments will improve. The current account deficit will decrease from 468 million rupees in 1970 to 255 million rupees in 1976. This will result in a decline in the balance of merchandise deficit from 325 million rupees to 183 million rupees; an inescapable deterioration of the net costs of 'profits, dividends and interest'; and an important improvement in the other items of the current account of the balance of payments (such as tourism, etc.). The total employment created by the planned investment will be over 800,000; thus the unemployment will decline from an estimated 550,000 unemployed people today to 290,000 at the end of the plan. This figure is considered as a maximum, as some special work programmes will be organized to offer some opportunities of employment for this residue.

Tables 23 to 27 summarize the main features of the Five-year Plan.

TABLE 22. Sectoral contribution to gross domestic product 1970 and 1976 (millions of rupees at 1970 prices)

Sector	1970		1976		
	Value in Rs. million	Share of each sector	Value in Rs. million	Share of each sector	Annual rate of growth per cent
Agriculture	4 264	36.3	5 671	33.7	4.9
Tea (includes processing)	810	—	953	—	2.8
Rubber (includes processing)	328	—	374	—	2.2
Coconut	593	—	727	—	3.5
Paddy	951	—	1 433	—	7.1
Other	1 582	—	2 184	—	5.5
Industry	1 523	13.0	2 692	16.0	10.0
Construction	771	6.5	1 094	6.5	6.0
Services	5 202	44.2	7 365	43.8	5.9
GDP at 1970 factor cost prices	11 760	100.0	16 822	100.0	6.1

1. These estimates are in constant prices. The investment in 1976 is not included, as output from this investment will be derived after the plan period.

TABLE 23. Investment in public and private sectors (millions of rupees at current prices)

	1972	1973	1974	1975	1976
Public investment	1 101	1 220	1 372	1 558	1 787
Private investment	1 464	1 522	1 583	1 603	1 607
TOTAL	2 565	2 742	2 955	3 161	3 394

TABLE 24. Financing of the investment programme (millions of rupees at current prices)

	1972	1973	1974	1975	1976
Gross investment	2 565	2 742	2 955	3 161	3 394
Sources of Finance					
Government savings [1] (surplus on current account	112	123	197	288	383
Surplus of public corporations	120	145	176	214	272
Private savings	2 024	2 133	2 255	2 382	2 513
Net capital inflow	309	341	327	277	226

1. These estimates are based on the classification in the national accounts.

TABLE 25. Savings and investment (millions of rupees at current prices) [1]

	1972	1973	1974	1975	1976
Gross domestic product at market prices	14 187	14 969	15 841	16 746	17 685
Gross investment	2 565	2 742	2 955	3 161	3 394
Gross savings at an average rate of 12.5 per cent	1 773	1 871	1 980	2 093	2 211
Shortfall of investment if savings remained at 12.5 per cent	792	871	975	1 068	1 183

1. These prices take into account only the projected changes in the prices of imports and exports. All projections in this table are necessarily based on an estimate of gross domestic product for 1971.

TABLE 26. Balance of payments forecast (millions of rupees at current prices)

Current Account	1970			1976		
	Credit	Debit	Net	Credit	Debit	Net
Merchandise	2 011	2 336	−325	2 710	2 893	−183
Profits, dividends and interest	11	153	−142	14	240	−226
Other	242	243	−1	410	266	+144
Total current account	2 264	2 732	−468	3 134	3 399	−265

SOURCE Tables 22-26, *Five-year plan*, op. cit.

2. Are the plan's targets realistic?

If, normally, it is difficult to decide on the realism of mid-term forecasts and assess the feasi' .ty of planned targets because of uncertainties in the future, in the present case it is even more difficult. This is because the Sri Lanka planners are not envisaging a slight alteration of past trends but have selected a strategy which implies a significant change in the future socio-economic conditions of the country.

In this respect, it is not easy to judge the chance of success or failure of the country to reach the national target. However, the following comments are made on the basis that some socio-economic rules will remain valid whatever the context and the political setting of the country. More specifically, we would like to discuss a few basic assumptions which govern the whole credibility of the plan's framework.

Gross saving rate

The plan assumes that the gross saving rate should rise from 12.5 per cent of GDP today to about 17 per cent of GDP in 1976 (see Tables 24 and 25). This means that total consumption would fall from 87.5 per cent of GDP to 83 per cent in 1976. Firstly, it is interesting to note that over the past ten years, not once has consumption reached such a low proportion of GDP, even during the last four years, when the rate of economic growth was very high and when the government took very strict measures to limit consumption in favour of investment (i.e., by increasing significantly the proportion of taxes on 'production and expenditure' from 65 per cent in 1965 to over 69 per cent in 1969 of the total current receipts of the government). Secondly, one of the major elements of the plan's strategy is to take several redistributive measures and to reduce social tension by raising the standard of living of the low-income group. It is a well-known phenomenon that the elasticity of consumption [1] is much higher for the low-income group than for the other groups. This means that saving is about nil in the case of the poorest segment of the population. Increasing the average saving rate from 12.5 per cent to 17 per cent implies, in practice, a much higher increase for the sector of the economy which can contribute to saving. Thirdly, the assumption on the saving rate requires, to be valid, very severe decisions to ensure a strict control of the rate of growth of consumption, as for some groups of the population consumption per head will grow significantly, for others consumption should at the best stagnate, and a few groups will see their consumption decline. Fourthly, according to the plan, government saving should more than treble over the period (112 million rupees in 1972 and 383 million rupees in 1976). To achieve such a level of surplus will require some fundamental changes in the government's budgetary

1. The ratio of increase of consumption due to increase in income.

policy. Over the past decade, the government has never shown the ability to create a surplus of this magnitude, and in the present context it would require very strict limitations of current expenditures and some new taxes to increase the government's income. To what extent is it realistic to envisage a change of this importance taking place within the coming three to four years?

Finally, even if the government takes such decisions, a time-lag is to be foreseen before all decisions are made and another time-lag before their full effect is noticed. To quote the Minister of Finance in his budget speech 1971-72: 'All this means that purposive and realistic dovetailing of the plan magnitudes and public sector levels of saving, investment, profits and expenditure would take time. I anticipate that this integration would be finalized in the next fifteen months'.[1] By way of an illustration, the 1971-72 budget, which includes proposals for raising revenue by an increase in taxation and for reducing expenditures by saving on the cost of food subsidies,[2] will only lead—if it succeeds—to a surplus of 57 million rupees. We are far from the 112 million rupees forecast for the first year of the plan!

In brief, it is highly questionable whether the total saving assumed in the plan is likely to be raised and whether it will be sufficient to obtain a net inflow of foreign capital of 1,500 million rupees to finance the investment programmes.

Is investment sufficient?

If on the saving side, the plan framework appears high, it seems that on the investment side the plan's estimates are rather low. The capital/output ratio assumed in the plan is around 3.25, while generally in the case of Sri Lanka it is probably closer to 4.0. If the latter figure holds true, it means either that with the same level of investment Sri Lanka will not reach 6 per cent growth per annum but about 5 per cent, or that in order to reach 6 per cent growth per annum the country would require 2,640 million rupees of investment in excess of that specified in the plan, for which some appropriate financing should be foreseen.

Admittedly, the true capital/output ratio is unknown, and the Sri Lanka planners justify their low assumption of this ratio as consistent with the broad strategy of the plan, which emphasizes the full utilization of existing capacities on labour-intensive techniques and on the small-scale sector in industry and agriculture. However, two factors of inertia make the hypothesis of such a low level of capital/output ratio somewhat doubtful. Firstly, it does not seem realistic to expect the results of the plan's strategy with regard to existing capital to have any practical effect before some two to three years at the best. Secondly, in spite of the under-utilization of existing production capacities, it is hard to admit that all production capacities are adequate. According to some

1. *Budget speech, 1971-72*, op. cit.
2. Increasing the price for the second measure of rice.

recent surveys, a significant proportion of capital equipment is obsolete or ill-adapted to the conditions of Sri Lanka; therefore 'fuller utilization' does not necessarily mean 'appropriate patterns of use'.

The foreign market

One of the major contributions to easing the financing of economic growth is the significant decline in the net merchandise deficit. In 1970, exports minus imports gave a deficit of 325 million rupees (see Table 26). In 1976, the figure would be 183 million rupees, the assumption being that exports will increase at a rate of over 5 per cent per annum and imports at only 3.7 per cent. To realize fully the critical change in foreign trade these hypotheses imply, one should recall that over the period 1961-70 the value of exports of goods and services has increased at only 1.68 per cent per annum, while the annual rate of growth of the economy was 4.8 per cent. Over the same period, the annual rate of growth of imports was in the neighbourhood of 3 per cent in spite of a very severe import policy.[1]

Here again, the Sri Lanka planners justify this pattern by noting quite rightly that they are consistent with the development strategy of the government, which includes the reduction of food imports by the immediate development and diversification of agriculture and the development of a new export sector. But the achievement of these elements of the strategy requires time, and it is very unlikely that significant results could be observed within such a short period, unless the terms of trade improve in a drastic manner. Unfortunately the experience of 1971 and the forecast for 1972 do not leave much room for optimism in this respect. According to the Minister of Finance, in 1971 'all things considered, there is no prospect of export proceeds surpassing the 1970 level; . . . it was realised that it was not possible to reduce the level of imports drastically from the 1970 level of 2,336 million rupees without causing tremendous hardship'. And according to the preliminary forecast for 1972 of the Ministry of Planning and Employment the value of exports will be 1,956 million rupees and of imports 2,197 million rupees. Thus altogether, from 1970 to 1972, export earnings would have fallen by 55 million rupees, and imports would have declined by 200 million rupees. But this has happened when the estimated rate of growth was 4.1 per cent in 1970, one per cent in 1971 and 4 per cent in 1972, while the Five-year Plan assumes 6 per cent as the annual growth rate. To put it differently, can a 6 per cent growth rate be achieved without a significant increase in imports of raw materials and investment goods ? The increase in exports is certainly possible, but this would require a change in the recent trend of world price levels. In brief, the foreign trade hypotheses have some support from experience, but they remain very uncertain.

1. In this respect, it should be noted that during the whole of the past decade, not once did the Sri Lanka government 'free' the imports of the country. On the contrary, a policy for cutting down imports started early in the 1960s, and was not discontinued but emphasized. The result however was still a 3 per cent increase in imports per annum.

The rate of growth

For a country like Sri Lanka, facing dramatic employment problems, one of the major priorities is to ensure a level of economic growth which would create opportunities for employment sufficient to reduce the present stock of unemployed. A 6 per cent rate has been considered necessary and desirable to contribute to easing the unemployment problems. Is it feasible ?

It is certainly possible to imagine a socio-economic context for Sri Lanka in the coming five years which helps to reach this target. The context is that of a population totally involved in the tasks of national development and reconstruction: prepared to accept hard sacrifices; to limit its consumption and increase its saving; to become more enterprising; to remain in, and develop, the rural areas; to consider, as a French leader once said, the plan as 'the ardent national obligation'. Furthermore, it is possible if some significant improvement occurs in the prices of tea, rubber and coconut products, increasing the export earnings, and if the government succeeds in limiting the imports and in creating a significant current surplus of income over expenditures by taking unpopular budgetary decisions.

There are however a lot of 'ifs' in these statements, and an average growth rate of 6 per cent over the five-year period seems very unlikely, especially when one takes into consideration the fact that the preliminary forecasts give only 4 per cent for the first year of the plan. With only 4 per cent in one year, Sri Lanka must achieve an average rate of 6.5 per cent in the other years of the quinquennium to reach its targets.

Under these circumstances, a question comes immediately to mind; how then will the country overcome its economic crisis ? To give some elements of an answer, it is necessary to look over a longer period of time, say of ten to fifteen years, and to state the problem somewhat differently.

3. A likely long-term trend

It is not possible to make any meaningful assumption regarding the prospective economic trend of a country unless, implicitly or explicitly, due reference is made to its socio-political framework. In the case of Sri Lanka one can imagine several hypothetical formulae, going from one extreme of 'total autarchy' (rigorous control of all segments of the economy, price, products, labour, income etc . . . with socialist options) to the other extreme of 'complete laissez-faire' (elimination of all socialist achievements and selection of a free-competition system).

Both hypothetical situations could take place in Sri Lanka, but neither has been assumed in the pattern of growth sketched in this section. An 'in-between' situation is expected, which would to some extent guarantee the main socialist achievements of the country, but adapt them more to its economic possibilities. To put it differently, the following projections are based upon the general

assumption that Sri Lanka will be moving from an unbalanced stage of socio-economic development to a more balanced one; from a very heavy social budget with its consequences on economic growth and unemployment to a somewhat more selective action in its socio-economic policy.

Because of the numerous uncertainties, and to escape from the constraints of the Five-year Plan, our reference horizon year is 1980.

It is fair to say at the outset that the parameters which determine the pattern of growth adopted in this section do not differ from those adopted in the plan. They are the foreign exchange constraint and the employment problem.

In the following forecasts the same amount of net inflow of resources from abroad is used as in the plan, and the strategy is to diminish the level of unemployment. The framework of the plan expects that with a 6 per cent rate of growth it will be possible to create 810,000 new jobs, whereas in this section it is assumed that this is unlikely. Over the period 1972-76, even assuming that the annual rate of growth will be 6 per cent, the new opportunities for employment will unfortunately not reach such a high level in five years.

The selection of the rate of growth

The argument used in the selection of the rate of growth is as follows:

(a) When speaking of a 6 per cent rate of growth over the Five-year Plan period, it is necessary to remember that the annual growth was 4 per cent in 1970, one per cent in 1971, and will be at the best 4 per cent in 1972. Thus an average of 6 per cent over the quinquennium means 6.5 per cent from 1972 to 1976—a very doubtful prospect indeed.

(b) Of the two problems facing the economy of Sri Lanka, one is imperative and almost entirely out of the control of the country in the short term, the other *cannot possibly be solved in the short term.* The first is the foreign exchange constraint, the second the employment problem. In actual fact, it is not realistic to assume more net capital inflow from abroad than the Sri Lanka planners did. Thus, in the selection of the economic growth rate it must be realised that in the coming four years this will be the final *determinant* of growth. Yet after the mid-1970s, if appropriate action is taken, some easing of the foreign exchange constraints can occur, and better prospects for solving the unemployment problem can arise.

(c) All the components of the government's strategy of development are valid and fully justified, yet there is normally a time-lag between the moment these decisions are taken and the time of their full impact on growth. Thus some structural parameters cannot radically change within a period of less than two to four years. This is so for capital/output ratio, productivity of labour, saving rates, consumption elasticities, etc.

Thus, on the whole, taking into account these factors and applying a simple set of assumptions, we come to the conclusion that what seems to be a realistic and likely pattern of growth is a steady and progressive increase of the rate of growth from 4 per cent in 1972 to 6.5 per cent in 1980 (5 per cent in 1976).

Over the planned period the average annual rate will at best be 4.5 per cent, but the plan will provide the conditions for structural changes in the economy of Sri Lanka, behavioural changes, and better prospects for employment in the second half of the decade. In this way the five-year plan would be not a plan for *immediate growth* but a plan building the conditions of *long-term growth*. It is not impossible to achieve 6 per cent and more every year in the immediate future—as the history of Sri Lanka since 1967 shows—but is it appropriate under the present conditions of foreign exchange for the country ? And is it desirable in the long run ? Our forecasts assume that the period 1972-76 will serve as a transition period to prepare the country for more permanent conditions for development. The following sections describe the characteristics of the economy in the coming eight years.

The increase in production

Table 27 describes the rate of growth by sector over the period. Total GDP will increase from 11,760 million rupees in 1970 to 18,590 million rupees in 1980—an annual increase of 4.6 per cent over the period. Taking into consideration what has been achieved up to 1972, the average annual rate of growth for the remaining eight years of the decade will be 4.9 per cent, which is approximately the same as the average rate during the 1960s. This shows that these assumptions are not on the conservative side, as in spite of its present economic crisis, Sri Lanka will achieve better than has been achieved during the past decade.

Industry will grow by 7 per cent. The potential is enormous for this sector but the major bottleneck for growth will be imports. Agricultural growth reflects the structural change envisaged: more production for local consumption to save on imports; improvement in agricultural exports.

TABLE 27. Economic growth by sector (millions of rupees)

Sector	1970		1980		Annual rate of growth (Percentage)
	Value	Percentage	Value	Percentage	
Agriculture	4 264	36.3	6 080	32.7	3.6
Industry	1 523	13.0	3 000	16.1	7.0
Construction	771	6.5	1 210	6.5	4.6
Services	5 202	44.2	8 300	44.7	4.75
GDP at 1970 factor cost prices	11 760	100.0	18 590	100.0	4.6

SOURCE IIEP estimate.

The condition of the economy

One essential target for Sri Lanka is to ensure a decline in its balance of payments deficit and thus restore its economic independence. The net capital inflow require-

ment will follow the same pattern as in the plan and decline steadily until 1980 as follows:

TABLE 28. Net capital inflow, 1972-8 (millions of rupees)

1972	1973	1974	1975	1976	1977	1978	1979	1980
309	341	327	277	226	210	200	190	140

The capital/output ratio will be declining from 3.5 in 1972 to 3.25 in 1975 and to 3.0 in 1980. This is more consistent with the present state of Sri Lanka's economy. In spite of the government's decisions to expand the use of existing capital and to develop labour-intensive sectors in, and outside of, agriculture, a time-lag is to be expected before the impact of these decisions is fully achieved.

To finance the required investment, taking into account the net capital inflow from abroad, it is easy to assess the saving required to achieve the economic growth. Total domestic saving should reach 15.2 per cent in 1976 and 17.8 per cent in 1980. These patterns seem more feasible than the rates assumed by the plan, especially if the breakdown of domestic saving between public and private sectors gives more emphasis to public saving than to private saving in the coming four years. In fact, in the economic context of Sri Lanka, any increase in private income will tend to be devoted to consumption, and it is naïve to expect a rise in the private saving rate in the coming two to three years unless some appropriate decisions for compulsory saving are taken. This fully justifies the government's decision to extend the compulsory saving schemes adopted in 1971 for a few years more.

A more direct way of achieving the domestic saving rates is to give a major role to public saving by creating a surplus on government current accounts. This can be achieved by the progressive introduction of an adequate system of direct taxation which will absorb the maximum share of increase in the private income, and by a very strict policy limiting public expenditure. In this respect the degree of freedom for the budget is limited, unless a decision is taken to replace the system of government social support to all by a more selective social system directed at needy families only. For example, food subsidies can be phased out except for the lowest income group; *ad hoc* decisions can be taken on health services, education, pensions, etc.

It is important to note that limiting or reducing the share of the social budget does not necessarily mean taking 'anti-socialist decisions'. So far, the social budget has benefitted every one in the island—but particularly the wealthier group of the population, who do not need food subsidies, free health services, generous pension schemes or free education. In addition, the incidence of a heavy social budget has meant devoting less effort to production investment and thus has limited the economic growth and contributed to the unemployment

problem. Under these circumstances, a more selective social policy limited to the more needy part of the population can help in finding more resources for investment and better opportunities for growth and employment. In the long run, more selective policies are probably a pre-requisite step for further socialist achievements in the country. The 1971/72 budget is a good illustration in this respect, as it paves the way for a significant change in the government's budget policy.

On the whole, government saving should increase from 68 million rupees in 1972 to 348 million rupees in 1976, and up to 785 million rupees in 1980. This can be achieved by increasing the revenues from direct taxation (1,600 million rupees in 1972 to 3,100 million rupees in 1980) and by limiting the growth of government current payments by eliminating or reducing the share of the social budget.

Finally, the effect of a selective public finance policy, combined with a very strict foreign trade policy, will ensure a continuous pattern of growth. The main parameters of this growth are indicated in Table 29.

TABLE 29. Growth of saving and investment (millions of rupees)

	1970	1972	1980
GDP at factor cost 1970	11 760	12 350	18 590
GNP at market prices	12 753	13 754	19 520
Balance of payments deficit	468	433	150
Gross national expenditures	13 221	13 628	19 670
Investment	2 492	1 942	3 625
Consumption	10 600	11 686	16 050
Domestic saving	2 024	1 509	3 475

SOURCE IIEP estimate.

The balance of payments deficit will start declining significantly after the middle of the decade, but will not disappear completely—150 million rupees deficit in 1980. The investment effort will be proportionately very high throughout the period and will reach 3,625 million rupees in 1980. Consumption will be severely limited, more during the five-year plan period than after. The compulsory saving scheme will maintain private saving at an appropriate level. Direct taxation will have the double effect of limiting private consumption and of contributing to creating public saving. On the whole, domestic saving should reach a very substantial amount of the gross domestic product; in 1980 3,475 million rupees out of 18,590 would be saved. This would be an achievement, especially as the country would by then have eased its foreign exchange constraints and started to solve its employment problem on a permanent basis.

The unemployment problem

A complete solution to the unemployment problem of Sri Lanka in the 1970s can hardly be expected. Today some 550,000 unemployed are seeking jobs, according to the more optimistic estimates. If one adds to this the increase in the labour force in the coming decade—from 2 to 3 per cent per annum according to the hypothesis—one finds that to solve the employment crisis it will be necessary to create about 1.5 million new jobs between 1972 and 1980. This is certainly possible if the average economic growth reaches about 8 per cent per annum; but it is clear from what has been discussed earlier that although highly desirable this does not seem feasible.

However, the government has adopted a wise strategy of achieving faster growth by exploiting to the fullest possible extent the manpower resources available. More specifically, two goals are accepted: more intensive use of existing capital; and selection of labour-intensive investment as opposed to capital-intensive investment. Such a policy is the only appropriate one in the case of Sri Lanka, and will contribute to reducing open unemployment. This policy should be applied massively, particularly for rural development, and a change of attitude and behaviour should be encouraged in the labour market through an appropriate and comprehensive income distribution policy. Government decisions announced in particular in the last budget speech make the plan strategy credible in this respect.

Unfortunately the practical impact of labour and income policy is slow to appear, save in the case of a very few exceptions which cannot contribute to reducing the unemployment problem in a significant manner. An example is the graduate executive pool decided upon in 1970, which would not affect more than 15,000 persons at the best.

Consequently, as the first year of the plan (1972) has shown, it is not wise to expect any significant change in the unemployment situation, in spite of the important efforts being made by the government. By 1976, the best we could expect would be a 20 per cent decline in the number of unemployed, provided the government pursues its recent labour and income distribution policy. This would require the creation of some 660,000 new jobs over the plan period; a difficult but feasible target. After 1976, the impact of the government's decision will be more noticeable, and it is reasonable to expect a decline from the present level of 550,000 unemployed to 300,000, which is a significant improvement. This result means that the total employment created would be as much as 1.15 million. Out of this total 200,000 would correspond to special work programmes organized in the urban, rural and estate sectors; 400,000 will be created in the agricultural sector; 250,000 in industry; 80,000 in construction; and 320,000 in the services. In spite of the unemployment residue this would be a remarkable achievement, because according to the assumptions made in these forecasts from 1972 to 1976 the total employment created will do no more than hold unemployment at its present level, and only after 1976 will unemployment start to decline.

Education in the public budget

In view of the main purpose of this study, it is of interest to analyse more explicitly the likely pattern of government expenditures over the period 1972-80, in order to show the prospective share of the educational budget in the total government budget.

For this purpose we have used the estimates made at the Ministry of Planning and Employment, which are based upon an hypothesis of growth of 6 per cent per annum. In addition, by assuming an increase in the government saving rate and radical changes in the social policy along the lines of more selectivity in public action, it is possible to estimate the total government current expenditures and their breakdown by sector as shown in Table 30.

TABLE 30. General government current consumption

	1969/70	1971/72	1979/80
Civil administration and defence	410.4	442.2	550-600
Economic services	130.3	142.3	180-200
Social services	732.9	798.0	1 050-1 100
(Education)	(472.4)	(510.9)	(600-700)
Other (transfers)	344.8	384.9	500-600
Total general government current expenditures (exclusive of food subsidies)	1 618.4	1 767.4	2 230-2 500

SOURCE IIEP estimate.

According to the above estimates, government current expenditures would be increasing at a much slower rate than current income, in order to raise a surplus which would contribute towards the level of saving consistent with the growth policy assumed in this study. The total current expenditures would be around 2,230 to 2,500 million rupees. The share of 'social services' in general, and 'education' in particular, would remain the same as at present.

In this context, funds available for education will not be expected to grow at a very high speed. On the whole, the government expenditure for education will be of the order of 600 to 700 million rupees in 1980, at best. The government will give priorities for investment and will limit consumption expenditure to ensure a significant take-off in growth and to create maximum opportunities for employment. Thus education, like other sectors, will not be in an easy position to obtain a larger share of government revenue. Unfortunately, this will be happening just at the period when education will be needing to adjust and to respond better to the socio-economic requirements of the country.

To sum up, what is considered as a likely long-term trend—though not entirely satisfactory—can help to ease the unemployment problem for the second half

of the decade. The rate of growth over the period 1972-80 is only 5 per cent, as against 6 per cent in the Five-year Plan. It is however the maximum possible rate, taking into account the foreign exchange constraint and the social pressure for consumption. In fact, even the framework of growth assumed in this study will not be easy to achieve. It requires a very sharp increase in the level of taxation, a very significant shift in government expenditures, and a very radical change in the growth strategy of the country as described in the *Five-year plan.*

> *'Is there no way of getting out of this situation—of raising our heads as an independent people, of producing most of what we want ourselves, of finding employment for the thousands of young men and women who join the ranks of the unemployed each year?'*
>
> Hon. Mrs. Sirimavo Bandaranaike in the foreword to the *Five-year Plan*

PART TWO

C. The educational system of Sri Lanka in the 1960s

The educational system in Sri Lanka is extremely complex in structure, organization and composition. This is mainly due to the fact that school education in Sri Lanka has a long record of growth, change and difficulties, extending over more than a hundred years. A full description of the development of the system would involve going so far back in history that it would certainly be beyond the scope of this study, and in many ways repetitive of what has been published in numerous articles, papers and books produced on the subject. For this reason we will limit the scope of this review to the last ten years only.

In order to familiarize the reader with the system and assess the major problems facing it in the early seventies, our review will attempt to answer five key questions:

1. What does the system look like?
2. How many of the population does it serve and how many work in it?
3. How much does it cost, and how is it financed?
4. How efficiently is it running?
5. How much is it a factor of development?

These questions will be discussed with as much illustrative and factual data as possible. Comments will not be avoided if qualitative information is necessary; on the whole, however, the so-called 'qualitative aspects' of education, i.e., content, curriculum and methods of teaching, will not be treated in this paper.

1. What does the system look like?

Its organization and structure: the historical background

The origin of the modern system of education lies in the appointment in 1940 of a Special Committee on Education, which recommended in 1943 that education should be free from the kindergarten to university level. The report of the committee highlighted the following major defects of the educational system:

'(a) The existence of two types of schools—one attended mainly by those who can afford to pay fees, and the other attended by those whose means do not permit them to do so.
(b) The existence of two types of schooling based on the medium of instruction—English for the favoured classes, and Sinhala and Tamil for the underprivileged.
(c) The resultant absence of equality of opportunity in education.
(d) The uniformity of curriculum and its excessive academic bias unrelated to the demands of the society'.[1]

The Free Education Scheme recommended by the committee was first introduced in 1945 and almost fully implemented by 1950, thus leading to a veritable educational explosion.

During the fifties there were several types of schools. In the case of first- and second-level general education, for example, there were four main categories: state schools; assisted private schools receiving grants from the state; unassisted private schools not receiving any form of aid from the state; and estate schools set up for the children of workers in the large plantations. In technical and vocational education some schools were controlled by the Department of Education, some by other departments, others by industry, private organizations, etc.

In the early 1960s an effort to centralize the co-ordination and control was made. For example, in 1962 the government grants to the assisted schools (first and second levels) were reduced to such an extent, and their autonomy limited to such a degree, that about 95 per cent of enrolment came under the direct control of the Minister of Education, before being completely absorbed into the public sector.

A complex organizational machinery

The educational system of Sri Lanka is a very large one, one of the largest centrally-controlled systems in the world. There are about 2.8 million students, 100,000 teachers and over 20,000 employees, almost totally under the control of the Ministry of Education. For a country of 12.5 million inhabitants this means that practically one quarter of the population is controlled by a huge and heavy single organizational body. This should be kept in mind when any evaluation of the system is attempted.

For the sake of accuracy, however, it should be made clear that several other authorities control parts of the system:
(a) in the government sector, several departments are responsible for education in the country (labour, health, agriculture, industries, etc.);
(b) in the public sector outside the government, a few institutions sponsor and manage training activities (Central Bank, Colombo Port, Transport Board, etc.);

1. R. K. Srivastava, *Educational planning in Ceylon: problems and prospects*, Colombo, Ministry of Planning and Employment, 1971.

(c) in the private sector, religious and lay organizations, profit-making and non-profit-making bodies control some categories of schools providing different types of education. (Buddhist schools, Missionary schools, secretarial and commercial training schools, etc.)

But calculations show that all these training activities outside the control of the Ministry of Education serve less than 10 per cent of the school population of the country. If one analyses separately, for each level and type of education, how the organization is shared among the Ministry of Education and other controlling bodies, one will see that:

(a) the formal system of training is on the whole over 90 per cent controlled by the Ministry of Education, whereas non-formal education is almost entirely in the hands of other institutions, either public or private.

(b) 95 per cent of first- and second-level general education is controlled by the Ministry, whereas the responsibility for vocational and technical training is equally shared among the other departments.

Three structural reforms in a decade

With regard to the structure of the system, several reforms have been introduced over the past decade. Up to 1964 the normal length of schooling was thirteen years exclusive of university training (from the age of 5 to 18 or more). It comprised six years' first-level education (two years in infant school and four years' first-level education), three years' junior second-level education, two years' senior second-level education, and two years' pre-university education.

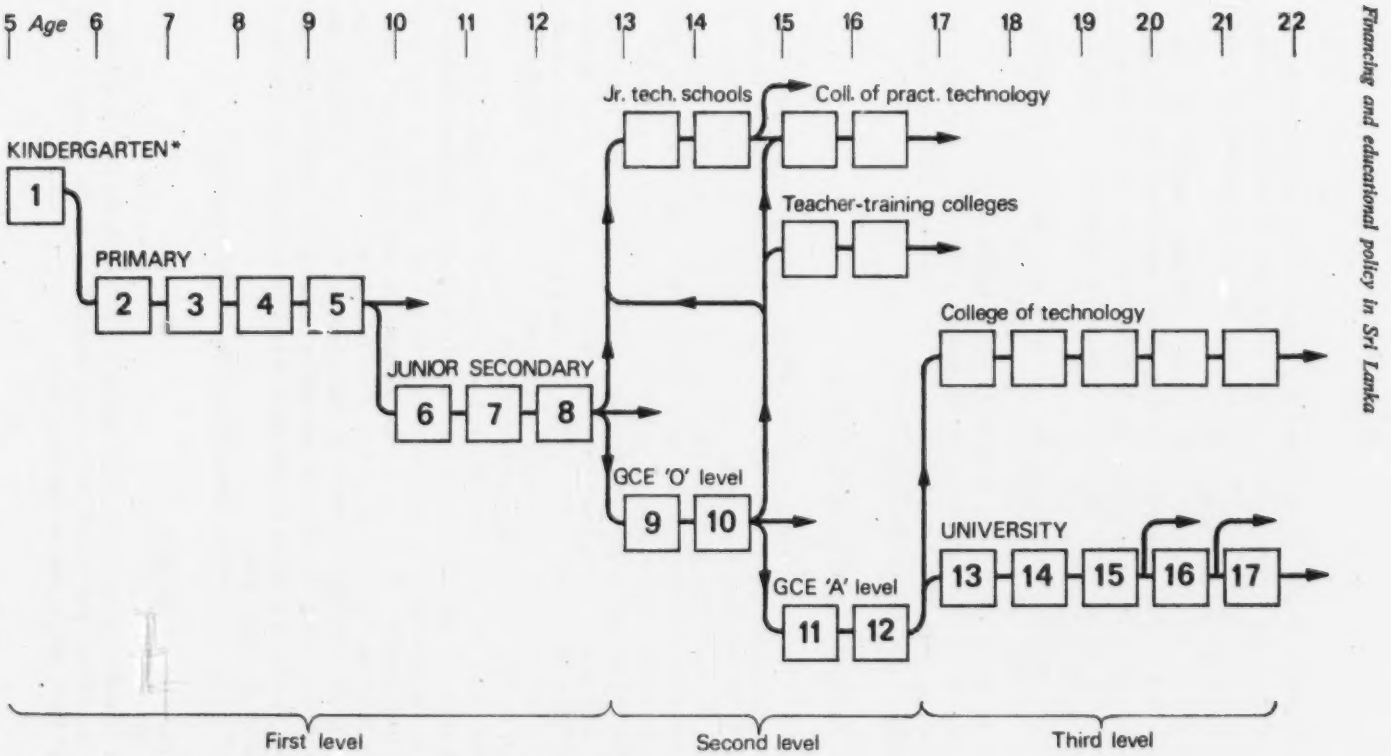
In 1964 the normal length of schooling was shortened to twelve years: one year in infant school, seven years' first-level education and four years' second-level education. As a result of this reform, the schools now contain two cohorts of pupils; one belongs to the former system, and one to the new system. The enrolment statistics reflect this situation, as will be seen later.

Between 1967 and 1968 the Ministry of Education introduced a further reorganization of the educational system, distinguishing between first-level education, corresponding to eight years' schooling from the age of 5 or over to 13 or over (grades 1-8) and second-level education, corresponding to 4 years' schooling from the age of 13 or over to 17 or over (grades 9-12). Although the eighth year of schooling theoretically belonged to first-level education, the ministry tried to integrate it into the second-level schools, to ensure satisfactory continuity between the pupils leaving grade 8 and those entering the diversified curricula of the ninth year.

A third reform is at present contemplated, as we shall see later.

The structure at present

Figure 1 describes the structure of the system in 1970/71, *before* the implementation of the educational reform as recently decided on in the context of the Five-year Plan, which will be described later.



*The duration of kindergarten was reduced in 1964 from 2 years to 1 year.

FIGURE 1. *The structure of the educational system before the new reform.*

The formal educational system can be divided into three levels:

(a) First-level education, of eight years' duration (grade 1 to grade 8) for pupils from age 5+ to age 12+. The curriculum is the same for all pupils except in *pirivena* (buddhist) schools:

(b) Second-level education, of two to four years; the official age of pupils is from 13+ to 16+. Four branches of studies are offered for pupils who complete grade 8. The majority are admitted in the academic stream in grade 9 (arts or science); two years junior high school leading to GCE 'O' level examination. A few pupils proceed for two years senior level leading to GCE 'A' level examination.[1] Some pupils are admitted to junior technical institutes in arts and crafts (for two years). In addition, after ten years of education some students enrol for two years in senior technical schools.

(c) Third-level education is given in the higher technical college, in teacher-training colleges, in junior colleges and universities.

The 'out-of-school' system—of minor importance in Sri Lanka—covers:

(d) Adult education given in seventy-two adult education centres;

(e) On-the-job apprenticeship training programmes in different sectors such as fisheries, plantations, agriculture, industry etc.;

(f) Short-term vocational courses provided on an *ad hoc* basis in different branches of activity by a few private institutions and public corporations and departments;

(g) Extension work.

The school network

The schools and their geographical distribution in the country reflect the numerous changes which have been occurring in the educational system.[2]

If we limit ourselves to the study of first- and second-level education in 1970, there were 9,644 schools in operation out of which: 8,748 were government schools; 41 private non-fee-levying schools; 45 private fee-levying schools; 803 estate schools; and seven night schools. Table 31 shows the breakdown of these schools by districts according to the number of grades. For example, out of 8,748 government schools in operation in 1970,

(i)	34	provided education	at	grades 1 and 2;
(ii)	743	"	"	" grades 1 to 5;
(iii)	5,281	"	"	" grades 1 to 7;
(iv)	150	"	"	" grades 1 to 8;
(v)	1,456	"	"	" grades 1 to 10;
(vi)	462	"	"	" grades 1 to 12;
(vii)	614	"	"	" grades 8 to 12; and
(viii)	8	"	"	" grades 9 to 12.

1. GCE 'O' level: General Certificate of Education at ordinary level. GCE 'A' level: General Certificate of Education at advanced level.
2. They also reflect the influence of other factors, such as the geographical distribution of the population.

TABLE 31. Schools classified according to grades provided, 1970. Number of schools.

	Grades at government schools								
	1-2	1-5	1-7	1-8	1-10	1-12	8-12	9-12	Total
Educational Districts									
Homagama	2	7	127	—	24	16	21	5	202
Colombo North	—	6	448	3	52	42	82	—	633
Colombo South	3	14	148	8	59	22	30	1	285
Kalutara	—	8	312	9	82	18	47	—	476
Matale	—	16	125	12	50	20	5	—	228
Kandy	1	36	372	6	117	60	44	—	636
Nuwara-Eliya	1	2	130	5	75	28	2	—	243
Galle	1	33	387	6	49	19	81	—	576
Matara	2	12	285	2	54	1	59	—	415
Tangalla	—	14	159	8	55	4	21	—	261
Jaffna	—	87	334	3	101	30	22	—	577
Mannar	—	24	61	1	17	1	1	—	105
Vavuniya	1	48	97	1	23	6	—	—	176
Trincomalee	2	43	58	4	29	5	3	1	145
Batticaloa	4	119	67	—	30	5	3	—	228
Amparai	2	7	48	2	16	—	9	—	84
Kalmunai	5	53	56	4	10	4	4	—	136
Chilaw	3	37	293	29	76	36	8	—	482
Kurunegala	1	18	429	13	152	63	26	—	702
Anuradhapura	—	66	305	9	77	7	49	—	513
Polonnaruwa	—	18	72	2	22	4	5	—	123
Monaragala	1	11	93	6	36	7	1	—	155
Bandarawela	4	11	171	2	52	16	18	—	274
Kegalla	1	24	394	6	103	17	57	—	602
Ratnapura	—	29	310	9	95	31	16	1	491
TOTAL	34	743	5 281	150	1 456	462	614	8	8 748

TABLE 31 *(continued)*

	Private non-fee-levying							Private fee-levying							Estate schools	Night schools		
	1-5	1-7	1-10	1-12	8-12	9-12	Total	1-7	1-8	1-10	1-12	8-12	9-12	Total	1-5	1-7	1-10	Total
Homagama	—	—	1	—	—	—	1	—	—	—	—	—	—	—	6	1	—	1
Colombo North	1	—	—	3	—	—	4	—	—	—	1	—	2	3	—	—	—	—
Colombo South	4	1	1	7	1	4	18	3	1	5	8	2	3	22	—	—	4	4
Kalutara	—	—	2	—	—	—	2	—	1	1	—	—	—	2	47	—	1	1
Matale	—	—	1	—	1	—	2	—	—	—	—	—	—	—	30	—	—	—
Kandy	—	—	1	1	—	—	2	—	—	—	3	—	—	3	121	—	1	1
Nuwara-Eliya	—	—	—	—	—	—	—	—	—	2	—	—	—	2	302	—	—	—
Galle	—	—	—	—	—	—	—	—	—	—	2	—	—	2	11	—	—	—
Matara	—	—	—	1	—	—	1	—	—	1	—	—	3	4	6	—	—	—
Tangalla	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Jaffna	1	—	1	6	—	—	8	—	—	—	—	—	—	—	—	—	—	—
Mannar	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Vavuniya	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Trincomalee	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Batticaloa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Amparai	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kalmunai	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Chilaw	2	—	—	—	—	—	2	2	—	—	—	—	—	2	1	—	—	—
Kurunegala	1	—	—	—	—	—	1	1	—	—	—	—	—	1	2	—	—	—
Anuradhapura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polonnaruwa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Monaragala	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—
Bandarawela	—	—	—	—	—	—	—	1	1	2	—	—	—	4	127	—	—	—
Kegalla	—	—	—	—	—	—	—	—	—	—	—	—	—	—	65	—	—	—
Ratnapura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	80	—	—	—
TOTAL	9	1	7	18	2	4	41	7	3	11	14	2	8	45	803	1	6	7

SOURCE Ministry of Education, *Medium-term plan for the development of secondary level and general education, 1972-76*, Colombo, 1971.

Out of the 2,540 schools in (v) to (viii), only 1,500 are officially reorganized for second-level education.

In second-level technical and vocational education there are: eight junior technical institutes; two senior technical institutes, under the control of the Department of Education; sixteen training institutions managed by other government departments; and five training institutions managed by state corporations providing facilities for training at the craft level. Three training institutions managed by the Departments of Agriculture, of Surveying and of Civil Aviation provide training at technical level. Finally, forty-six apprenticeship programmes managed by government departments, state corporations and private firms provide training courses of six months' to five years' duration (see Table 32).

In teacher training there are:

(a) twenty-four non-specialist teacher-training colleges (for level I teachers) and three specialist teacher-training colleges (for level II teachers).

In third-level education there are:

(a) one higher technical college;
(b) six junior colleges;
(c) four universities providing undergraduate and post-graduate training.

The medium of instruction

Not all the schools teach in the same language, as three teaching languages are in use in Sri Lanka: Sinhala, Tamil and English. The majority of the schools teach in one language only, but some use two or even all three languages. This results from legislation passed in 1951, which decided among other things upon 'the adoption of the mother tongue of the pupil as the medium of instruction'.

2. How many of the population are involved?

Enrolment and teachers: an overview

Table 33 shows the pattern of enrolment expansion since 1960.[1] It calls for a number of comments.

By and large, despite a significant increase in enrolment (of over 20 per cent), the trend is by no means comparable with that in various other countries in the same region, where growth rates were much higher over the same period. The essential reason for this is that educational expansion in Sri Lanka took place during the 1950s.

1. See also Tables 1 to 7 in Appendix II.

TABLE 32. Enrolment and output of technical institutions, 1965-69

	C.T.C.		C.C.T.		J.T.I. Kandy		J.T.I. Galle		J.T.I. Jaffna		J.T.I. Badulla		J.T.I. Kurunegala		J.T.I. Kegalla		J.T.I. Anuradha-pura		J.T.I. Ratmalana		Total	
	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L	A	L
Technical																						
1965/66			229	132																	229	132
1966/67			206	144	20	—	23	—	15	—											264	144
1967/68			416	276	17	20	18	23	25	15											476	334
1968/69			402	222	23	17	17	18	52	25											474	282
Trades																						
1965/66	42	39			40	19	38	32	50	47	34	42	40	—	40	—	40	—			323	179
1966/67	43	32			40	39	48	41	66	74	48	34	45	40	—	36	31	35	116	—	437	331
1967/68	39	39			60	39	46	37	70	59	43	33	54	45	70	—	40	22	123	116	545	390
1968/69	39	26			55	55	59	39	76	40	49	34	53	46	35	70	40	23	120	123	526	456
Commerce																						
Professional																						
1965/66	71	11																			71	11
1966/67	92	20																			92	20
1967/68	121	28																			121	28
1968/69	145	41																			145	41
Technical																						
1965/66	72	33			33	34	59	47	78	28	48	4	—	—	36	25					326	171
1966/67	74	28			64	28	58	27	85	22	16	6	—	—	—	31					297	142
1967/68	34	61			65	31	77	37	114	24	6	16	49	—	43	—					388	169
1968/69	97	50			105	12	92	78	134	50	43	9	50	49	47	43					568	291

A = new admissions. L = leavers.

SOURCE Ministry of Education and Cultural Affairs, *Addendum to perspective of pre-vocational, vocational and technical education: the existing situation*, Colombo, 1969

TABLE 33. Trend of enrolment 1960-70 (in thousands)

	1960	1964	1970
First level (grades 1-8)	2 008.2	2 275.0	2 329.0
Second level (grades 9-12)	225.0	345.0	351.0
(of which 11-12)	(17.0)	(45.0)	(45.0)
Technical	2.1	3.6	6.6
Teacher training	4.8	4.9	6.0
Third level	3.7	8.2	13.0

SOURCE Ministry of Education

Table 33 shows that the greatest expansion of the enrolment took place in the first half of the sixties (almost 18 per cent), whereas since 1964, the total enrolment did not expand significantly (less than 3 per cent). But the trend was different according to the level of education.

With regard to first-level education (grades 1 to 8), the trend of enrolment numbers is not regular: there was a moderate rise from 1960 to 1964; a drop in 1965 following the shortening of the official period of schooling; an abnormal expansion in 1966 as a result of the confluence of two cohorts of children due to the educational reform;[1] a drop in 1967; and a slow upward movement until 1969 (see Table 34). Taking the total figures, the enrolment numbers in 1969 were roughly equal to those for the year preceding the 1964 reform, but in the former case, eight years' education were covered, and in the latter, nine years. This somewhat complicates the comparison, even if in both cases the numbers enrolled belonged to roughly the same age groups.

In any event, the enrolment numbers at the first level have remained virtually unchanged throughout the period, in contrast to the situation usually found in most developing countries. The main reason is that, even in 1960, Sri Lanka already had a relatively well-developed educational system, as the enrolment rate at first level in the '5+ to 14+' age group was 79 per cent. Over the last decade enrolments at the first level have thus largely followed the same trend as the school-age population, since the enrolment rate has risen very little during the period considered.

With regard to second-level general educational enrolment (grades 9 to 12), no significant change has been experienced since 1964 (see Table 34), while between 1960 and 1964 it almost trebled for grades 11 and 12 and increased by nearly 50 per cent in grades 9 and 10. Enrolments appear to have stabilized from 1964 onwards.

In technical education a steady increase is observed, with the result that in 1970 enrolments were more than three times the enrolments of 1960. Table 32

1. Pre- and post-reform.

TABLE 34. First- and second-level general education: pupil enrolment by grades, 1960-69 (thousands).

Grades	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1A	414.8	397.8	364.0	406.6	385.6	380.8	431.9	419.8	429.1	461.8
1B	311.5	308.0	302.6	330.6	359.0	332.3				
2	278.5	285.5	286.5	297.6	320.9	299.9	358.0	331.0	351.0	377.9
3	248.1	257.7	265.5	272.7	280.6	266.7	461.9	336.8	298.1	302.8
4	212.5	233.4	232.0	239.6	246.6	241.6	233.9	365.5	298.1	302.8
5	177.4	189.5	198.3	203.4	217.8	214.8	210.6	192.5	303.2	308.0
6	151.1	160.7	169.2	172.7	179.8	185.1	188.0	179.8	170.5	248.6
7	118.7	131.9	138.6	141.4	149.5	156.0	159.8	155.7	162.5	150.1
8	96.2	108.4	119.1	116.2	135.8	139.0	140.8	136.4	140.1	146.2
Sub-Total 1-8	2 008.8	2 072.0	2 075.8	2 180.8	2 275.6	2 216.2	2 184.9	2 117.5	2 152.8	2 293.2
9	85.2	90.3	99.1	101.7	117.1	119.3	118.1	113.9	125.8	121.2
10	122.6	142.4	141.4	143.7	182.9	174.9	184.1	186.1	183.2	176.4
Sub-Total 9-10	207.8	232.7	240.5	245.4	300.0	294.2	302.2	300.0	309.0	297.6
11	10.1	13.4	21.4	21.2	22.6	20.1	20.0	23.0	22.1	21.4
12	7.3	9.6	13.0	13.5	22.6	26.3	24.7	22.8	24.0	23.3
Sub-Total 11-12	17.4	23.0	34.4	34.7	45.2	46.4	44.7	45.8	46.1	44.7
8-12	321.4	364.1	394.0	396.3	481.0	479.6	487.7			488.5
Grand Total 1A-12	2 234.0	2 327.7	2 350.7	2 460.9	2 620.8	2 556.8	2 531.8	2 463.3	2 507.9	2 640.5

SOURCE School Census Returns, Statistics Division, Ministry of Education.

describes the enrolment in and output of technical institutes of the Ministry of Education since 1965/66. In the case of junior technical institutes, enrolment grew from 447 in 1966/67 to 579 in 1968/69 in the technical streams and from 254 in 1965/66 to 471 in 1968/69 in the trade streams. As for senior technical institutes, enrolment has increased from 229 in 1965 to 402 in 1968/69 at Amparai and from 185 to 281 over the same period in the Ceylon Technical College of Maradana.

In teacher training the enrolment has been stagnant in the first part of the decade, but a steady increase in enrolment has been taking place during recent years. Table 35 shows the detailed evolution of intake, enrolment, graduates and recruitment of teachers coming from specialist and non-specialist training colleges since 1965. Enrolment in non-specialist training colleges has increased by 12 per cent over five years. The increase is more significant (+ 26 per cent) in the case of specialist training colleges.

By far the most dynamic pattern in terms of expansion of enrolment has been in third-level education, although some slowing-down has occurred recently

TABLE 35. Output of teacher-training system for first-level schools

	1965	1967	1968	1969	1970
1. *Specialist training colleges*					
(a) Intake	619	766	744	749	750 [1]
(b) Enrolments	1 188	1 510	1 533	1 561	1 500 [1]
(c) Graduates	446	522	699	702	655 [1]
(d) Recruitment	446	522	699	702	655 [1]
2. *Non-specialist training colleges*					
(a) Intake	1 926	2 190	2 143	1 893	2 618
(b) Enrolments	3 946	4 037	4 130	4 200	4 511
(c) Graduates	1 913	2 046	1 712	1 762	1 800 [1]
(d) Recruitment	1 913	2 046	1 712	1 762	1 800 [1]
3. *Other categories recruited for first-level education* [2]					
(a) Intake	—	—	9	8	15
(b) Enrolments	—	—	9	8	15
(c) Graduates	—	—	—	9	8
(d) Recruitment	—	—	—	9	8

1. Estimated figures, see below.
2. All teachers in this category are university graduates, who follow a course of specialized training to teach blind children. The duration of this course is one year, and it was started in 1968.

NOTE: Outputs of the specialist training colleges are for work in the second-level classes (secondary classes, i.e. grades 8-12; age-group 12 to 16 yrs.) and those of the non-specialist training colleges are in the main for work in first-level classes (Elementary classes, i.e. grades 1-7, age-group 5 to 11 yrs.) and they handle a considerable teaching load in second-level classes also.

Assumptions underlying the estimated figures: Students entering the specialist and the non-specialist training colleges graduate in the third year.

(a) In the specialist training colleges 84 % of the intake in 1965 have graduated in 1967 and 91 % of the intake in 1967 have graduated in 1969. Therefore it is assumed that 88 % of the intake in 1968 would graduate in 1970.

(b) In the non-specialist training colleges 88 % of the intake in 1965 have graduated in 1967 and 80 % of the intake in 1967 have graduated in 1969. Therefore it is assumed that 84 % of the intake in 1968 would graduate in 1970.

SOURCE *Medium-term plan*, op. cit.

in the admission to university. On average the annual rate of growth of enrolment has been 13.5 per cent over the last ten years (index 350). (See Table 36.) The breakdown of university enrolment by department is given in Table 37 for the period 1967/68—1969/70. The majority of students follow arts studies (65 per cent in 1970). Medicine, technology, engineering and science departments each serve between 4.5 per cent and 11.5 per cent of all students. Table 37 shows also that total admissions have declined from 4,052 in 1968/69 to 3,705 in 1969/70, the main decrease being in the departments of arts and humanities.

TABLE 36. Trend of total higher education enrolments and enrolment ratio, 1960-70

	1960	1961	1962	1963	1965	1968	1969	1970
University enrolments	3 684	4 655	5 117	5 706	10 707	14 110	12 538	11 448
Higher school enrolments	—	—	—	—	400[1]	700	887	1 936
Total	3 684	4 655	5 117	5 706	11 107	14 810	13 425	13 384
Population of relevant age-group (in thousands) [2]	681	716	751	784	844	923	954	983
Enrolment ratio	0.54	0.65	0.68	0.73	1.32	1.60	1.41	1.36

1. Estimate.
2. 18-21 years, allowing for the official length of studies leading up to first degree (3 years).
SOURCE IIEP based upon various official sources.

TABLE 37. Undergraduate full-time students (all universities) [1]

	1967/68		1968/69		1969/70	
	Admissions	Enrolments	Admissions	Enrolments	Admissions	Enrolments
Arts, etc.	2 355	10 745	2 752	9 165	2 337	8 116
Bio-science	206	427	149	520	333	521
Physical science	324	541	198	569		528
Medicine	230	1 500	227	1 351	229	1 421
Dental surgery	28	101	25	84	21	84
Agriculture	31	103	37	116	38	137
Veterinary science	21	77	20	78	18	80
Engineering	151	616	151	647	149	551
Architecture	—	—	8	8	4	10
Ceylon College of Technology	514	700	485	887	576	1 096
TOTAL	3 860	14 810	4 052	13 425	3 705	12 544

1. In addition, seven junior university colleges were opened in January 1969 (one of which is for women). Altogether 840 students were admitted to these colleges.
SOURCE National Council for Higher Education.

Enrolment ratios

To have a more significant indication of the expansion trend of the educational system of the country, it is usually appropriate to compare the enrolment figures to the relevant school-age population. Table 38 gives a brief summary in this respect over the period 1952-64.

The trend is striking since 1952. In first-level education, the apparent school enrolment ratio increased steadily from 1952 till 1960. Since 1960 the change in the number of years of schooling in the first level and the high rate already reached by Sri Lanka explain the diminution of the ratio. In the case of second-level education, a steady increase is observed from 1952 until 1964, so much so that in 1964 45.4 per cent of the 15-19 age group were in second-level general education. This is a very high rate of participation for a country at the level of economic development of Sri Lanka. On the other hand, in spite of an increase in the school enrolment ratio in second-level technical education the participation rates remain very low. Teacher education has been levelling off or slightly declining since 1960. The participation rate in third-level education has more than trebled since 1956, and in 1964 almost one per cent of the 20-24 age-group were enrolled in the university. Thus on the whole, a very steady increase in the 'apparent enrolment ratio' is observed over the period 1952-64: from 57.2 to 73.9 per cent in the first level; from 14.11 to 46.19 per cent in the second level; and from 0.28 to 0.9 per cent in the third level. What has been the pattern since 1964? Table 39 indicates the trends in this respect for first- and second-level general education.

The 'apparent school enrolment ratio'[1] has varied according to the grade, and no significant trend is observed. This is basically due to the reduction of the number of years in the first level and to the changes which have occurred

TABLE 38. Pupil or student enrolment by levels as a percentage of the age-groups indicated

Year	First level (5-14 yrs)	Second level general (15-19 yrs)[1]	Second level technical (15-19 yrs)	Second level teacher education (15-19 yrs)	Third level university (20-24 yrs)
1952	57.2	13.6	0.22	0.31	0.28
1956	57.2	20.5	0.18	0.28	0.28
1960	79.0	33.6	0.21	0.51	0.43
1962	76.5	38.9	0.27	0.51	0.56
1964	73.9	45.4	0.33	0.46	0.90

1. 1952-62: grades 9-12. 1964: grades 8-12.
SOURCE Ministry of Education, *Perspectives for the development of second-level general education 1970-80* (Part II — data, statistics, projections), Colombo 1970.

1. The ratio of enrolment to the official age, i.e., grade 1 = 6 +, grade 2 = 7 +, etc.

TABLE 39. Apparent enrolment ratio

Grade	1963	1965	1968	1970
1	116.9 [1]	104.5 [1]	129.0	124.0
2	102.0	98.0	106.0	111.0
3	96.0	89.0	91.0	101.0
4	86.0	83.0	95.0	87.0
5	75.0	76.0	100.0	85.0
6	65.0	67.0	58.0	83.0
7	55.0	55.0	57.0	51.0
8	46.5	53.0	50.0	50.0
9	42.0	47.0	46.0	40.0
10	62.0	71.0	69.0	67.0
11	9.5	8.5	8.5	7.0
12	6.0	11.5	9.5	10.0
Grades 1-8	80.6 [1]	79.7 [1]	75.1	88.0
Grades 9-10	51.8	58.6	57.4	55.5
Grades 11-12	7.9	9.9	9.1	8.4
Grades 1-12	66.0	66.5	62.9	71.1

1. Enrolment refers to grade 1B.
SOURCE Ministry of Education.

in repetition rates. Both factors have contributed to an artificial inflation of the enrolment in some grades for some years and a deflation in the following years.

The most striking result of the comparison of apparent enrolment ratios (for grades 1 to 8; grades 9 and 10; grades 11 and 12) is that since 1963 Sri Lanka has not significantly altered its participation rates even for senior second-level education. This is an unusual pattern for a developing country. Nowhere else in Asia can such an evolution be observed. This fact reflects the development of the educational system of Sri Lanka as far back as the early 1960s.

Student flows by grade and by age

A more accurate method of examining the school participation by age is to analyse the school enrolment in each grade in relation to the age of the children. Table 40 summarizes the participation by age in September 1969.

It can be seen that owing to differences in the age of admission of different children, and to the effects of repetition, pupils enrolled in grade 1 belong to the age group 5 to 12; pupils in grade 12 to the age group 15 to 23! This makes any comparison of participation rates very difficult to interpret.

Some meaningful ratios (see Appendix II, Table 8)

Another method of assessing the development level of a school system is to estimate some ratios relating to enrolment in different grades and levels and to

TABLE 40. Students classified by age and grade (government and private schools, excluding

Grade	Aged 5	6	7	8	9	10	11	12	13
1	103 061	199 757	76 750	24 368	8 079	2 524	1 298	60	
2	5	56 114	154 487	90 706	41 507	17 855	7 574	598	
3	—	—	35 520	126 942	87 749	50 284	20 477	8 467	2 506
4	—	—	1 327	30 177	97 820	75 509	44 947	22 766	8 549
5	—	—	—	1 994	32 715	83 157	69 727	47 881	22 722
6	—	—	—	—	2 191	26 312	75 538	77 558	43 642
7	—	—	—	—	—	1 049	7 847	40 022	49 676
8	—	—	—	—	—	—	41	9 105	38 455
9Arts	—	—	—	—	—	2	1	8	3 883
9Science	—	—	—	—	—	—	—	—	2 765
10A	—	—	—	—	—	—	—	—	337
10S	—	—	—	—	—	—	—	—	202
11A	—	—	—	—	—	—	—	—	39
11S	—	—	—	—	—	—	—	—	—
12A	—	—	—	—	—	—	—	—	149
12S	—	—	—	—	—	—	—	—	—
TOTAL	103 066	255 871	268 084	274 187	270 061	256 692	227 450	206 465	172 925

SOURCE Medium-term plan, op. cit.

compare them among themselves, and with the relevant age-groups. Table 41 illustrates the condition of development of the school system in Sri Lanka in 1969.

According to the data given in Table 41, almost 83 per cent of pupils who complete grade 8 of first-level education are admitted to grade 9. The majority of them enter the arts stream (63.7 per cent of pupils enrolled in grade 8). The breakdown between arts and sciences and the progress through grades 9 to 12 are given in Table 42. On the whole, enrolment in the arts stream represents 78.2 per cent of total enrolment in grades 9-10 in 1969 and 70.1 per cent of total enrolment in grades 11-12 during the same year.

Enrolment in grade 11 represents about 12 per cent of enrolment in grade 10. This means that the first selection in admission is in grade 11.

Those who take GCE 'O' level constitute a more or less significant proportion of the corresponding age-group depending upon the subject.

Of grade 12 pupils, 16.7 per cent are admitted to the universities; this represents about 1.6 per cent of the population of 18 years of age.

On the whole, the apparent enrolment ratio is 89.3 per cent for the first level, 32 per cent for the second level [1] and 1.4 per cent for the third level.

1. See also Table 9 in Appendix II.

estate schools, 30 September 1969

14	15	16	17	18	19	20	21	22	23	
										415 897
										368 846
638	229	19								332 831
2 550	914									284 559
7 879	2 772									268 847
18 710	6 092	1 799	381	124						252 347
31 612	14 258	4 723	1 242	300						150 729
47 017	29 801	13 748	4 807	1 399	39	1				144 413
19 899	27 570	20 135	9 516	3 035	838	187	33	4		85 111
9 759	8 484	4 069	1 465	385	93	25	5	2		27 052
4 673	21 831	41 278	38 481	22 808	9 000	2 375	489	109		141 381
2 749	10 411	12 838	9 084	4 234	1 486	409	95	52		41 560
—	229	1 238	3 104	3 544	2 521	1 070	340	105	24	12 214
2	278	1 115	1 662	1 497	924	416	133	40	12	6 079
—	23	257	1 484	3 635	4 779	3 919	2 064	827	302	17 439
—	19	289	1 049	1 977	2 252	1 718	959	340	81	8 684
145 488	122 911	101 508	72 275	42 938	21 932	10 120	4 118	1 479	419	2 557 989

Teaching staff

In 1970 there were 3,911 teachers employed by estate and private schools, 94,580 teachers in government first- and second-level schools, 287 teachers in technical education institutions of the Ministry of Education, and 1,033 lecturers, readers and professors in the universities.[1]

In the case of teachers in first- and second-level schools, their number increased by 30 per cent from 1960 (69,658) to 1970 (94,580) whereas during the same period enrolment grew by only 20 per cent. This indicates a decrease in the average pupil/teacher ratio, estimated globally for first- and second-level education.

But in order to be meaningful these figures should be analysed by level of education and in relation to the qualification of teachers. Table 43 makes some relevant estimates.[2] (See also Table 11 in Appendix II.)

The chief conclusion emerging from a comparison of teaching numbers in 1960 and 1970 is that there was a marked improvement in the general standard

1. A breakdown of the university teaching staff in 1968/69 is given in Table 10 in Appendix II.
2. It should be noted that the statistics of the Ministry of Education do not break down the teachers by level; the figures in Table 43 are estimates made by the IIEP.

TABLE 41. Some meaningful ratios in 1969

Enrolment	Percentage	Enrolment	Percentage	Subject	Percentage
1. Grade 1 / 5-6 age group	= 137.5	7. Grades 11 + 12 / 16-17 age group	= 8.4	13. GCE 'O' level passes expressed as a percentage of the corresponding age group in 1968:	
2. First level / 5-13 age group	= 89.3	8. Technical / 14-17 age group	= 1.1	Sinhalese	47.6
3. Grade 9 / Grade 8	= 82.9	9. Second level / 14-17 age group	= 32.0	English	5.2
4. Grade 9 arts / Grade 8	= 63.7	10. Admission third level / Grade 12	= 16.7	Arithmetic	12.2
5. Grades 9 + 10 / 14-15 age group	= 52.5	11. Admission third level / 18 age group	= 1.6	Mathematics	7.2
6. Grade 11 / Grade 10	= 11.9	12. Third level / 18-21 age group	= 1.4	History	11.2
				Agricultural Sc.	2.7
				Physics	8.0
				Metalwork	0.2
				Woodwork	0.5

SOURCE IIEP estimates.

TABLE 42. Enrolments in second-level arts and science government schools, 1966-69 (in thousands)

Grades	1966	1967	1968	1969
Enrolment 8	135.2	133.1	136.7	139.1
Enrolment 9 arts	89.5	87.2	89.4	81.2
Enrolment 9 science	19.5	19.0	22.6	24.3
Percentage 9 arts	82.1	81.9	79.8	76.9
Percentage 9 science	17.9	18.1	20.2	23.1
Enrolment 10 arts	136.5	136.4	137.4	135.1
Enrolment 10 science	32.3	36.1	35.6	35.9
Percentage 10 arts	80.9	79.1	79.4	79.0
Percentage 10 science	19.1	20.9	20.6	21.0
Enrolment 11 arts	13.5	14.9	13.4	11.7
Enrolment 11 science	3.6	5.4	4.9	4.9
Percentage 11 arts	78.9	73.4	73.2	70.5
Percentage 11 science	21.1	26.6	26.8	29.5
Enrolment 12 arts	17.7	15.7	16.9	16.2
Enrolment 12 science	4.0	4.5	6.6	7.0
Percentage 12 arts	81.6	77.6	70.2	69.8
Percentage 12 science	18.4	22.4	29.8	30.2
Percentage 9-10 arts	81.4	80.2	79.6	78.2
Percentage 9-10 science	19.6	19.8	20.4	21.8
Percentage 11-12 arts	80.4	75.1	72.5	70.1
Percentage 11-12 science	19.6	24.9	27.5	29.9

SOURCE *Perspectives*, op. cit.

TABLE 43. Structure by qualification of the teaching force

	1960	Percentage	1970	Percentage
Graduates	3 429	4.9	7 440	7.9
Non-graduates	66 229	95.1	87 140	92.1
of which: trained	22 361	32.1	41 280	43.6
certificated	18 878	27.1	22 910	24.2
non-certificated	24 990	35.9	22 950	24.3
Total	69 658	100.0	94 580	100.0
of which: first level	53 888	77.4	72 940	77.1
second level	15 770	22.6	21 640	22.9

SOURCE IIEP estimates.

of qualification of teachers, with a higher percentage of university graduates and holders of diplomas from teacher-training colleges. It may be noted that, in view of the high percentage of non-qualified teachers practising at the beginning of the 'sixties, and the difficulty teacher-training colleges had in meeting requirements, in 1965 the National Education Commission recommended the creation of a new teacher category of 'preliminary trained teachers'. To be admitted to this category the candidate had to have four credits in appropriate subjects at GCE 'O' level, at least one year's teaching experience, at least fifty hours' class teaching in each of the four subjects, and must have passed written and practical tests on the methods of teaching them. Teachers admitted on this basis can prepare for the entrance examination to a teacher-training college. In practice, however, the 'preliminary trained teacher' category has never been established, but students have been able to follow a teaching career on the lines of the 1965 recommendation by taking an examination in a teacher-training college, two years' study and a diploma upon completing the course.

The fact remains that, despite the marked improvement in the general standard of qualification of teachers, one out of four still had no professional qualifications in 1970. The proportion is even more striking if first-level education is considered alone: out of 72,940 teachers, 22,350 (or 31 per cent) had no academic qualifications.

In this respect there is a marked difference between first-level and second-level education, both as regards the level of qualification of teachers and as regards pupil/teacher ratios. This is because virtually all graduate teachers, and the most experienced diploma-holders, teach in second-level schools. Also the average pupil/teacher ratio is still twice as high in grades 1 to 8 as in grades 9 to 12, despite an appreciable improvement since 1960.

3. Costs and finance

The financing of education in Sri Lanka is fairly simple to describe, as almost all the educational income is from the central government budget, through the Ministry of Education (95 per cent of all educational expenditures are financed by public sources) or other departments.

The total provision outside the Ministry of Education for the fiscal year 1971/72 (as indicated in Table 44) is 21 million rupees for recurrent expenditures and 27 million rupees for capital expenditures, as against 678 million rupees and 58 million rupees for the Ministry of Education.[1]

As a matter of fact, not only does the Ministry of Education run its own schools and institutions but it also provides teachers for other schools (estate, special, etc.), and covers part of all other expenses in the form of grants and allowances. For example, *pirivena* schools are entitled to receive 150 rupees per unit of average daily attendance, 1,000 rupees as library allowances for junior classes (and for the first hundred pupils enrolled), etc. Similarly, special schools

TABLE 44. Recurrent vocational and technical education expenditure by sponsoring authority and level of qualification: estimate 1971/72 (thousands of rupees)

Ministry or department	Current	Capital	Total
Defence	987	700	1 687
Planning and employment	175	18 000	18 175
Labour	2 740	7	2 747
Administration	1 335	243	1 578
Industries	1 700	—	1 700
Justice	40	800	840
Agriculture	3 004	2 618	5 622
Fisheries	380	—	380
Housing	149	4 664	4 813
Post	643	—	643
Health	8 800	—	8 800
Social services	856	67	923
Others	384	146	530
TOTAL	21 193	27 245	48 438

NOTES: 1. Ministries of Administration and Health spend basically to train their own personnel. By and large Agriculture, Labour and Industries are the only ministries whose training is available to the public.
2. Total capital allocations for the Ministry of Planning and Employment are very exceptional and not significant of the annual pattern.
3. Budget for 1971/72 covers fifteen months.
SOURCE Budget estimates.

1. It is worth mentioning at this stage that the 1971/72 budget is not typical, to the extent that total allocations for capital expenditure are far in excess of the usual pattern. In 1969/70, for example, total capital expenditure on education was about 30 million rupees, out of which only 5 million rupees came from outside the Ministry of Education.

for handicapped children sponsored by social organizations receive the salary of their teachers from the Ministry of Education. In the case of estate schools, the grant given by the government covers 75 per cent of the costs.

Other sources of financing education, of minor importance, can be listed as follows:

(a) *Local authorities* (very rarely) in the form of donations, library facilities, etc.

(b) *Foreign aid*, mainly in the form of scholarships and capital investment; Table 45 shows the distribution of capital expenditure financed from abroad during the past three years (the provision for 1971/72 is around five million rupees).

(c) *Families and individuals*, in the form of grants, donations and fees. There is no accurate estimate of their annual contribution, but several indications lead to the conclusion that they reach about 1 to 1.5 per cent of the total educational budget.

In first- and second-level education fees are paid to fee-levying institutions and 'donations' given to non-fee-levying institutions. Kindergartens receive about twenty rupees per month for fees.

In technical and vocational training programmes sponsored by private or para-statal institutions students are charged fees which vary considerably from course to course. By way of an illustration, the Bankers' Training Institute of the Central Bank levies tuition fees from 35 to 125 rupees per year, depending upon the subject and the length of training.

In third-level education students pay registration and examination fees which are almost nominal when compared with the cost. They were 2.2 million rupees in 1969/70 out of a total income of 33.8 million rupees.

(d) *Enterprises, corporations and estates:* they run some schools and have to support part of all the costs incurred. The order of magnitude of all these contributions would be a maximum of five million rupees in 1970.

TABLE 45. Trend of capital expenditure of the Ministry of Education financed from external aid, by level (thousands of rupees)

	1969/70	1970/71	1971/72
First-level education	0	0	0
Second-level education	164	677	1 256
Teacher training	0	0	0
Vocational and technical education	0	0	0
Third-level education	0	569	3 078
School building (general)	0	150	250
Administration	0	0	124
TOTAL	164	1 396	4 708

SOURCE Budget estimates.

On the whole, in spite of a lack of accurate estimates of the non-governmental contributions to education, we can conclude from Table 46 that they should be about two per cent of the educational budget of the country. As the only systematic records of expenditures available relate to the government, which represents 98 per cent of the total expenditures, we will limit our cost analysis to the expenditures from public sources.

Difficulties of analysis

The basic statistics are provided by budgetary estimates and government accounting, which should not, in principle, cause any difficulty. In actual fact, the accounts do not allow a breakdown of costs between first- and second-level education.[1] Furthermore, several schools take pupils at both levels, which does nothing to help isolate the expenditures at each level. Consequently, it is hardly possible to analyse expenditure and unit costs on the basis of the budget material alone. The Ministry of Education therefore had to work out estimates from a

TABLE 46. Estimate of the financing of education by sources, 1971/72 (millions of rupees)

	Total	First and second level, and teacher training	Technical	Higher
1. *Ministry of Education and related depts.*				
Current	678.0	549.3	38.6	50.2
Capital	57.6	11.4	11.1	13.0
Total	735.6	560.7	49.7	63.2
2. *Other Ministries*				
Current	21.9	—	21.9	—
Capital	27.2	—	27.2	—
Total	49.1	—	49.1	—
3. *Total Government*				
Current	699.9	549.3	60.5	50.2
Capital	84.8	11.4	38.3	13.0
Total (foreign aid)	784.7 (5.5)	560.7 (2.0)	98.8 (3.0)	63.2
4. *Private sources*				
Current	15.9	6.6	6.0	3.3
5. *Total, all sources*				
Current	715.8	555.9	66.5	53.5
Capital	84.8	11.4	38.3	13.0
Total	800.6	567.3	104.8	66.5

NOTE Data given in this table cover a period of 15 months, October 1971-December 1972.
SOURCE IIEP estimates.

1. The first attempts were made in the 1971/72 programme budget.

sample study of schools. In some cases the figures supplied by the Ministry of Education will be supplemented by estimates made by the IIEP.[1] Unless stated differently, all the estimates in the following sections refer to expenditures made by the Ministry of Education.

Trend of the current budget

Table 47 shows the general trend of current expenditure since 1959/60.

Over the ten years (1960-70) all government expenditures for education have increased by 73.5 per cent (more for current than for capital expenditures). However, to be significant this trend, which is given in current prices, should

TABLE 47. Public expenditures on education and GNP (millions of rupees)

	1959/60	1964/65	1968/69	1969/70	1970/71
1. Current expenditures on education	270.4	323.5	410.6	472.4	484.6
2. Capital expenditures on education	25.0	31.0	31.6	40.1	68.2
3. Total	295.4	354.5	442.2	512.5	552.8
4. Index numbers: current prices	100.0	120.0	149.7	173.5	187.1
constant prices	100.0	121.0	129.6	144.6	—
5. Total current payment of the government	1 365.4	1 895.8	2 612.3	2 849.8	3 009.3
6. Total capital payment of the government	454.6	535.4	909.8	883.1	1 194.5
7. Total	1 820.0	2 431.2	3 522.1	3 732.9	4 204.8
8. 1/5 as percentage	19.8	17.1	15.7	16.6	16.1
9. 2/6 as percentage	5.5	5.8	3.5	4.5	5.2
10. 3/7 as percentage	16.2	14.6	12.6	13.7	13.1
11. GNP at market prices	6 650.0	8 012.8	11 564.8	12 597.5	
12. 3/11 as percentage	4.4	4.4	3.8	4.1	—
13. (2/11 as percentage)	(0.3)	(0.4)	(0.25)	(0.35)	—
14. (1/11 as percentage)	(4.1)	(4.0)	(3.55)	(3.75)	—

SOURCE IIEP estimate based on Central Bank statistics.

1. The method is briefly as follows: an arbitrary decision is made with regard to the breakdown of the teaching force between first- and second-level education according to qualification; an estimate of 'other current costs' breakdown by levels is made on the basis of a statistical survey of the Ministry of Education; then by combining 'teachers' salaries costs' with 'other current costs' a comparison is made between first- and second-level education in terms of average expenditure per pupil.

be examined in constant prices, in relation to the public budget and to the gross national product. Table 47 shows that the educational sector has not been benefitting from any priority allocation over the past decade:

(a) In constant prices, the total public expenditure on education has increased by 44.6 per cent over ten years (this is no more than 3.75 per cent per annum). Remember that the enrolment has increased during the same period by 22 per cent, and at much higher rates for the most expensive education (technical and third-level).

(b) Related to the government budget, the share of education has been declining, or at the best remained stagnant (from 19.8 per cent to 16.6 per cent for the current budget and from 5.5 per cent to 4.5 per cent for the capital budget). However, some divergent trends can be seen during the intermediate years of the decade.

(c) Related to GNP, it is quite clear that education has more or less maintained its share in the national production. These trends are quite unusual for those who are familiar with what was happening in other countries of the world during the same period of time, when the share of education in the GNP and the public expenditure was steadily increasing. Some explanations therefore are appropriate; they can be illustrated by an analysis of expenditures and cost.

Analysis of expenditures by level

Table 48 summarizes the distribution of expenditures by level of education. It is very interesting to note (in spite of the difficulties of comparison among the years, as the data are not quite consistent), that the share of first- and second-level education, by far the most dominant, is declining over the period—

TABLE 48. Current expenditures by level (percentage)

	1960	1964	1966	1970
First and second levels and teacher training	95.6	94.8	93.8	86.8
of which:				
First level	(73.2)	(64.3)	(62.3)	(58.2)
Second level	(15.9)	(25.5)	(26.8)	(25.1)
Teacher training	(6.4)	(4.9)	(4.7)	(3.5)
Second-level technical	0.6	0.6	0.8	6.3
Third level	3.8	4.6	5.4	6.9
	100.0	100.0	100.0	100.0

SOURCE Budget estimates 1971/72.

from 95.6 per cent in 1960 down to 86.8 per cent in 1970. Technical and higher education have benefitted from this decline, as their share has increased from two- to three-fold over the period.

However, to have a more significant picture of the distribution of expenditures by level, we need to break down the first item of Table 5 to identify the trends separately for first- and second-level education. Data available are not adequate for such a breakdown, and we have had to make several assumptions and use different partial indications from various sources to separate the global current expenditures for first- and second-level education. Table 48 describes the pattern: first-level education has experienced a sharp decline in its share (from 74.4 per cent to 61.6 per cent) while second-level education has increased its share by 50 per cent.

Analysis of expenditures by object

Because of the absence of a standardized data system, it is very difficult to analyse expenditures for each level of education according to the same item. We have therefore followed a different pattern of analysis for a different level of education:

(a) In the case of first and second levels (see Tables 49 and 50) the salaries of teachers and other personnel have been increasing their share in expenditure during the past years. They constitute the dominant parts of the budget. A steady decline of the proportions of the budget going to pupil welfare and facilities and services illustrates the deterioration in the conditions of schooling at these levels. For example, in 1969 expenditure for 'pupil welfare' and 'facilities and services' was only 21.8 million rupees, while in 1966 expenditure under the same headings was 24.6 million rupees.

(b) In the case of teacher training (see Tables 49 and 51), the major item is obviously the salary paid to student teachers, which comes under the heading

TABLE 49. Expenditures by purpose (percentage)

	Salaries	Pupil welfare	Facilities and services	Administration
A. First and second level				
1960	84.2	5.6	7.3	2.9
1962	84.4	5.0	7.3	3.2
1964	89.0	4.0	4.0	3.0
1966	88.7	4.3	3.7	3.2
1968	89.0	3.6	2.4	4.9
B. Teacher training				
1965	16.9	79.8	3.4	
1967	18.1	77.7	4.1	
1968	22.2	70.3	7.5	
1969	22.1	68.7	9.2	

SOURCE IIEP estimates.

TABLE 50. Trend of current first- and second-level general education expenditure by nature (in government schools)

	Administration	Teacher salaries	Other salaries	Facilities and services	Pupil welfare	Total
1960	6.5	109.5	1.4	9.6	12.8	139.8
1962	8.1	213.0	3.5	18.8	13.1	256.5
1964	8.6	253.6	5.1	11.9	12.9	292.1
1966	10.0	267.0	3.6	11.4	13.2	305.2
1968	15.9	284.9	4.6	7.9	11.7	325.0
1969	18.4	283.8	3.5	9.8	12.0	327.5
Average breakdown (percentage)	4.1	85.8	1.3	4.2	4.6	100.0

SOURCE IIEP estimate.

TABLE 51. Current cost of the teacher-training system (thousands of rupees)

Non-specialist training colleges	1965	1967	1968	1969	1970 [1]
(a) Salaries [2]	1 601.9	1 804.8	2 507.5	2 597.5	2 700.9
(b) Students stipends [3]	7 576.3	7 751.0	7 929.6	8 064.0	8 661.1
(c) Other costs [4]	319.5	413.8	848.6	1 075.2	1 926.4
TOTAL	9 497.7	9 969.6	11 285.7	11 736.7	13 288.4

1. Estimate derived from Sri Lanka government estimates 1969/70, Head 145, Vote 4, Sub-heads 27 and 36, and 55 to 61.
2. Salaries include those of teaching and non-teaching staff only.
3. Student stipends include payments made to teacher-trainees.
4. Other costs include expenditures incurred for maintenance of and improvements to training colleges. They also cover general expenditure, curriculum development, payments to experts, library books, etc.

SOURCE *Financing and costs of first and second-level general education programme, including teacher education, 1964/65, 1967/68 and 1968/69*, Secondary Education Division, Ministry of Education, Ceylon.

'pupil welfare' or 'student stipends'. However, their share in the total has declined from 79.8 per cent in 1965 to 68.7 per cent in 1969 and to about 65 per cent in 1970. On the other hand, the salary cost (i.e. salaries paid to teachers and other personnel of the teacher-training colleges) has been increasing from 16.9 per cent in 1965 to 22.1 per cent in 1969, and 'other costs', including expenditure for maintenance and improvements to training colleges, has been increasing very rapidly as their share in the total current expenditures has almost trebled in four years.

In the case of technical education (see Tables 52, 53 and 54), the pattern is different between junior and senior technical institutes. The proportion of

salaries of teaching staff is much lower in technical education than in general education. In the case of junior technical institutes, teacher salaries represent 47 per cent of current expenditure in 1966/67; they declined to 44.5 in 1970/71. In senior technical institutes, teacher salaries represented 35 per cent of current expenditures in 1966/67 and increased to 40.5 per cent in 1970/71. Other salaries

TABLE 52. Expenditure on technical education at junior technical institutes (in rupees)

	Salaries teaching staff	Salaries non-teaching staff	Building costs	Furniture	Equipment	Other expenses	Total (thousands)	Total current (thousands)
1966/67	1 056 429	356 081	1 150 000	240 000	340 000	575 000	3 717	2 227
1967/68	1 181 920	512 528	1 400 000	45 000	2 250 000	612 000	6 001	2 351
1968/69	1 328 088	576 737	1 550 000	175 000	300 000	687 000	4 617	2 767
1969/70	1 113 293	482 335	2 600 000	150 000	250 000	707 000	5 303	2 453
1970/71	1 103 260	469 547	2 350 000	188 000	200 000	715 000	5 026	2 476

TABLE 53. Expenditure of senior technical institutes (in rupees)

	Salaries teaching staff	Salaries non-teaching staff	Building costs	Furniture costs	Equipment costs	Other costs	Total (thousands)	Total current (thousands)
1966/67	305 781	235 216	—	110 000	180 000	220 000	1 051	871
1967/68	798 572	659 457	—	40 000	265 000	286 000	2 049	1 784
1968/69	947 708	783 028	850 000	25 000	150 000	316 000	3 072	2 072
1969/70	989 242	744 204	650 000	50 000	50 000	314 000	2 706	2 006
1970/71	749 693	612 242	1 200 000	75 000	200 000	412 000	3 249	1 849

TABLE 54. Expenditure of the Sri Lanka College of Technology at Katubedda (in rupees)

	Salaries teaching staff	Salaries non-teaching staff	Furniture costs	Equipment costs	Other costs	Total (thousands)	Total current (thousands)
1966/67	647 222	277 381	—	50 000	—	974	974
1967/68	739 074	316 770	—	200 000	30 000	1 286	1 086
1968/69	1 440 180	548 649	—	350 000	67 370	2 406	2 056
1969/70	1 423 422	542 263	—	300 000	252 150	2 518	2 218
1970/71	1 055 810	420 039	68 000	250 000	277 150	2 071	1 821

SOURCE Tables 52-4, internal document of the Ministry of Education.

TABLE 55. Estimated university expenditure and sources of funds, 1969/70

	University of Ceylon Peradeniya	University of Ceylon Colombo	Vidyodaya University of Ceylon	Vidyalankara University of Ceylon	Total
Estimated income (rupees)					
Government grant (recurrent)	15 128 500	9 575 000	3 486 900	3 485 500	31 675 900
Other sources [1]	1 296 107	372 397	296 149	203 500	2 168 153
TOTAL	16 424 607	9 947 397	3 783 049	3 689 000	33 844 053
Estimated recurrent expenditure (rupees)					
General administration	2 050 538	1 363 600	741 278	785 209	4 940 625
Academic departments	11 507 697	7 101 142	2 372 717	2 316 256	23 297 812
Student services	583 397	244 758	106 953	162 496	1 097 604
Maintenance services	1 302 975	527 897	279 101	262 039	2 372 012
Furniture & equipment	980 000	710 000	275 000	155 000	2 120 000
Provident fund on interim allowances	—	—	8 000	8 000	16 000
TOTAL	16 424 607	9 947 397	3 783 049	3 689 000	33 844 053

1. Other sources of income are Registration Fees, Examination Fees, etc.

SOURCE Estimates of income & expenditure of the national council of higher education and universities in Ceylon for the financial year 1st October, 1969 to 30th September, 1970, from *Report of the national council of higher education, 1969/70.*

represent 19 per cent of current expenditures in junior institutes and 33 per cent in senior institutes in 1970/71.

In higher education (see tables 52, 53, 54 and 55) the analysis of expenditures by object shows that the bulk of current budget is spent on 'academic departments'—69 per cent. 'General administration' represents almost 15 per cent of total current expenditure in 1969/70. In the case of the Sri Lanka College of Technology the breakdown of expenditure shows a pattern similar to that of second-level technical education institutions.

Finally, it is to be noted that in 1969/70 11,538 rupees were spent educating the physically handicapped and 28,224 rupees for adult education (see Table 12 in Appendix II).

Analysis of capital expenditure

Table 56 describes the evolution of capital expenditure by level over the past three years. The increase is significant for all levels, but the priorities for investment have been (and seem still to be) in second-level and technical education: 31 per cent in 1969/70; 37 per cent of total provisions in 1971/72. On the whole, total capital expenditure on education represented 2.7 per cent of total public capital expenditures in 1969/70, 4.1 per cent in 1970/71 and 2.8 per cent in 1971/72.

According to Table 57, 3.5 per cent of capital expenditure in education was financed through external aid in 1970/71; the major effort of foreign aid is in second-level education (13.2 per cent) and in technical and vocational training (7.3 per cent). No capital finance from abroad was provided for first-level, teacher-training and third-level education in 1970/71.

TABLE 56. Trend of total capital expenditure of the Ministry of Education by level of education (rupees)

	Actual 1969/70	Estimates 1970/71	Estimates 1971/72
Administration	562 252	1 437 800	1 809 795
First-level education	578 772	803 870	1 185 000
Second-level education	2 807 495	5 164 500	8 242 500
Technical education	5 560 396	7 756 010	11 118 930
Teacher training	987 799	1 650 000	1 933 500
Third-level education	—	7 020 525	8 223 530
School building (general) [1]	16 518 923	16 700 000	19 825 000
Total capital educational expenditure	27 015 637	40 532 705	52 338 255
Total public capital expenditure	990 600 000	993 700 000	1 865 730 000
Capital expenditure on education as percentage of total capital expenditure of the government	2.7	4.1	2.8

1. Most of the capital cost of first-level education comes under the heading of 'School building (general)'.
SOURCE 1971/72 Budget.

TABLE 57. Capital expenditure of the Ministry of Education by level and by source of finance, 1970/71 (thousands of rupees)

	Ministry of Education	External aid	Total
First-level education	804	0	804
Second-level education	4 487	677	5 164
Teacher training	1 650	0	1 650
Technical and vocational education	7 187	569	7 756
Third-level education	7 020	0	7 020
School building (general)	16 550	150	16 700
Administration	1 438	0	1 438
TOTAL	39 137	1 396	40 533

SOURCE IIEP estimate based on budget.

Unit cost data

AN OVERALL VIEW

Because of the lack of accuracy of any time-series on unit costs, due to the inadequacy of statistics, we are limiting our analysis of unit costs by level and type of education to the most recent years.[1] Table 58 indicates how average unit current expenditure [2] behaves in relation to (i) level of education and (ii) item of expenditure. Several comments can be made:

(a) The range of unit current expenditure varies considerably from first- to third-level education. The ratio of the two extremes is as high as 55.

(b) For all levels of education, salaries of teachers and other staff constitute by far the major determinant of unit cost (except in teacher training, because of the cost of stipends paid to student teachers which appear under the heading 'Maintenance').

(c) Unit expenditures per student in junior technical institutes are fairly high in comparison with second-level general.

(d) Unit expenditures in third-level education are very high and vary from 1,811 rupees for arts students to as much as 7,218 rupees for students in veterinary sciences. Thus any expansion of enrolment at this level of education should be carefully costed because of its implications on the educational budget.[3]

TABLE 58. Average current expenditure per pupil in 1969 (in rupees)

	Salaries	Welfare	Maintenance	Materials	Administration	Other [2]	Total
First level	102	4	3	3	5		117
Second level	270	15	22		20		327
Teacher training	620		1 920		430		2 960
Technical [1]	565	19	89		116		790
Third level arts	982	95	101	36	337	260	1 811
Third level sciences	1 425	95	101	184	337	648	2 790
Engineering	2 169	95	101	252	337	618	3 572
Medicine	2 344	95	101	200	337	767	3 844
Agriculture	3 769	95	101	388	337	770	5 460
Veterinary sciences	5 310	95	101	388	337	987	7 218

1. Average expenditure per student in junior technical institutes is 700 rupees. Figures in this column relate to the junior technical institute at Kegalla.
2. Includes research cost.
SOURCE IIEP estimate based on budget.

1. For capital cost data see Appendix II, Tables 13 and 14.
2. Average unit expenditure is a ratio of current expenditure over enrolment.
3. Although some economies of scale can occur in some departments; e.g., an expansion in enrolment can bring down unit costs.

(e) Owing to the large share of salary cost in the unit expenditures, it appears that two factors play key determinant roles in the behaviour of unit costs. They are: (i) staffing conditions, measured for example by student/teacher ratios; and (ii) qualification and remuneration of the teaching force.

In fact, in first-level education, the pupil/teacher ratio is thirty-two; in second-level, sixteen; in junior technical institutes, fifteen; in third-level, it varies from about twenty-five in arts to about five in agriculture and veterinary sciences.

The average salaries paid to various categories of teachers are as follows:

Category of teachers	Rupees
Pupil-teachers	2 300
Certificated and uncertificated teachers	2 860
Teachers coming from general teacher-training institutions	3 650
Teachers coming from special teacher-training institutions	3 960
Craft demonstrators	3 870
Instructors and lecturers in vocational education	6 030
Graduate teachers: arts, humanities and social sciences	6 200
Graduate teachers: natural sciences	6 400
Graduate teachers: agriculture	7 440
Graduate teachers: engineering	7 800
Senior university staff: arts, humanities, social sciences and natural sciences	14 400
Senior university staff: agriculture	14 700
Senior university staff: medicine	17 210
Senior university staff: engineering	17 400

Thus it appears quite clearly that by combining the effect of average salary and staffing ratios, it is fairly simple to explain the differences in unit current cost among the various levels and types of education. This is well illustrated by a separate analysis of current unit expenditure by level.

ANALYSIS BY LEVEL

Tables 59 and 60 indicate the trend in unit current expenditure since 1960 in first- and second-level education. Several remarks can be made:

(a) Over the decade, unit current expenditures have more than doubled for first- and second-level education, the increase (in current prices) being higher in second-level.

(b) If the average recurrent cost per pupil is expressed in relation to GDP *per capita*, it is very significant to note that in Sri Lanka average recurrent expenditures per pupil have represented between 12.5 and 14.8 per cent of GDP per capita since 1962 in first-level education, and 35 to 38.7 per cent in second-level. If 1960 is not included in the comparison of time-series unit cost, there is no noticeable trend.

(c) The share of teacher salaries in first- and second-level education is such that it determines almost entirely the evolution of unit expenditure.

(d) The evolution of staffing ratios (average number of pupils per teacher) contributes to explaining the behaviour of unit expenditure. If we consider the evolution over the years 1960-70 we find that the staffing ratio has declined by 13 per cent and average salaries *per capita* increased by 75 per cent; thus the net effect on unit expenditure for first and second level taken together

TABLE 59. Recurrent unit costs of general education: total recurrent costs per pupil, 1960-70 (rupees)

Sponsoring authority	1960	1962	1964	1966	1968	1970
First-level education						
Cost in national currency	55.0	93.0	92.0	97.0	103.0	117.0
Cost in US $	11.6	19.5	19.3	20.4	17.3	19.7
Exchange rate used	4.76	4.76	4.76	4.76	5.95	5.95
Cost as percentage of GDP *per capita*	8.6	14.8	13.7	14.3	12.5	12.5
Second-level education						
Cost in local currency	132.0	232.5	239.0	262.0	288.0	339.0
Cost in US $	27.7	48.8	50.2	55.0	48.4	57.0
Cost as percentage of GDP *per capita*	20.6	37.1	35.6	38.7	35.0	36.1

SOURCE IIEP estimate based on budget.

TABLE 60. Recurrent costs of first- and second-level education and personnel costs 1960-70 (millions of rupees)

	1960	1962	1964	1966	1968	1970
First-level education						
Recurrent expenditure	115	193	209	212	222	269
of which, teacher salaries [1]	107	154	177	188	194	266
Second-level education						
Recurrent expenditure	25	63	83	91	102	116
of which, teacher salaries [2]	18	50	66	73	86	100
For public education [3]						
Average salary [4]	1 504	2 681	2 714	2 947	3 218	3 870
GDP per capita	2.35	4.28	4.10	4.35	3.91	4.12
Average number of pupils per teacher	32	30.8	29.2	28.6	28.7	27.9

1. 80 per cent of current expenditures.
2. IIEP rough estimates.
3. First and second levels.
4. *Total salary bill:* The salary bill for teachers should preferably be compared with the number of teachers. If teachers cannot be distinguished from other personnel total salary bill and total personnel should be used.

SOURCE IIEP estimate based on budget.

is about 62 per cent. Over the same years unit expenditure expressed in terms of GDP *per capita* has grown by 46 per cent in first-level and by 75 per cent in second-level education.

Tables 61 and 62 describe the evolution of recurrent cost per student in different branches of higher educational institutions. They show in particular that the

TABLE 61. Average cost per student, 1968/69

	Arts	Science	Engineering	Medicine	Agriculture	Vet. Science
Administration						
Wages	258.0	258.0	258.0	258.0	258.0	258.0
Other costs	79.0	79.0	79.0	79.0	79.0	78.0
Academic departments						
Teachers' wages	813.0	1 088.0	1 330.0	1 704.0	1 768.0	3 274.0
Teachers' travelling, etc.	45.0	75.0	75.0	64.0	76.0	150.0
Non-teachers' wages	24.0	262.0	764.0	576.0	1 925.0	1 886.0
Other departmental costs	87.0	336.0	271.0	367.0	361.0	363.0
Research cost	116.0	155.0	190.0	243.0	253.0	468.0
Student welfare	95.0	95.0	95.0	95.0	95.0	95.0
Maintenance services	101.0	101.0	101.0	101.0	101.0	101.0
Furniture & equipment	36.0	184.0	252.0	200.0	388.0	388.0
Library						
Wages	70.0	70.0	70.0	70.0	70.0	70.0
Books & periodicals Other costs	87.0	87.0	87.0	87.0	87.0	87.0
TOTAL	1 811.0	2 790.0	3 572.0	3 844.0	5 460.0	7 218.0

SOURCE National Council of Higher Education, *The framework of a plan for the development of universities in Ceylon 1969-78* Colombo, 1969.

TABLE 62. Recurrent unit costs of higher education: total recurrent costs per student in different branches, 1969 (rupees)

	University						Non-university
	Arts	Science	Engineering	Agriculture	Medicine	Veterinary	Technical college Katubedda
University education							
In national currency	1 811	2 790	3 572	5 460	3 844	7 218	2 156
In US $	304	469	600	918	646	1 213	362
Exchange rate used	5.95	5.95	5.95	5.95	5.95	5.95	5.95
Cost as multiple of GDP *per capita*	2.04	3.15	4.03	6.16	4.34	8.15	2.43

difference in terms of unit expenditure among them can be explained by the share of the costs of 'academic departments' in the total cost. For example, if unit expenditure per student is almost three times higher in agriculture than in arts, it is essentially due to the fact that:

(a) teachers' wages per student are 813 rupees in arts and 1,768 rupees in agriculture;
(b) non-teachers' wages are negligible in arts (24 rupees) but enormous in agriculture (1,925 rupees);
(c) other current costs, including 'travelling' and 'research', are also much higher in agriculture than in arts.

Similar comparisons can of course be made for all branches of higher education. On the whole, each student in higher education costs the country between two and eight times the GDP *per capita*. This is an important conclusion which should be kept in mind when considering the role of higher education in the national economic development.

4. How efficiently is it working?

The preceding sections show the important role that education plays in Sri Lanka, and the enormous effort that this country has devoted and is still devoting to this sector. The question then arises as to whether this system is functioning in a satisfactory manner.

In quantitative terms, the performance of any educational system can be examined from two different (though related) angles: (a) its internal efficiency, as assessed by the entries and flow within the system; (b) its external productivity and effectiveness, by examining whether the system is achieving its implicit or explicit socio-economic objectives. The former will be discussed in this section; the final section will be devoted to the latter aspect.

Enrolment data, grade by grade, are available from 1952. If the educational system is viewed as a whole, and the progress of the first cohort [1] is traced through the system, it is seen that out of 100 students entering grade 1 in 1952 thirty to thirty-one reached grade 8; twenty-seven to twenty-eight reached grade 10; six or seven grade 12; and 1-1.5 reached university. The picture is slightly better if one looks at more recent years. On average 37 per cent of the intake of grade 1 in 1969 would reach grade 8, and 19 per cent of the intake of grade 9 would reach grade 12.

Table 63 shows retention rates in the school system since 1955. It shows the improvement which has taken place over the years in terms of retention in the school system. This is due partly to a decline in the drop-out rates, but probably also to an increase in the average number of years of schooling per pupil in first-level education.

1. Data are related to admissions in 1952.

TABLE 63. First- and second-level general education retention rates, 1955-69

Grade	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1967	1968	1969
First level														
1A	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1B	74.5	74.7	74.9	75.9	76.4	75.4	74.3	76.1	90.8	88.3	86.2			
2	66.3	69.1	71.6	74.0	69.4	69.7	69.1	69.1	74.8	88.2	73.8	86.9	83.6	88.1
3	61.1	59.6	64.5	66.1	68.4	63.6	64.5	64.3	65.7	70.5	73.3	87.3	78.3	72.1
4		52.4	53.0	57.7	59.5	60.8	57.3	58.0	58.0	59.3	60.7	89.9	71.3	79.5
5			44.9	46.0	51.2	52.3	54.2	50.8	50.8	52.7	51.8	52.9	74.6	79.9
6				39.0	41.3	45.8	47.7	48.4	44.3	45.0	44.8	45.2	46.8	61.1
7					33.9	35.1	39.7	40.9	40.5	38.3	39.0	37.5	40.8	41.2
8						30.5	32.0	36.1	34.3	38.9	35.6	33.0	33.8	36.8
Second level														
8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
9	81.8	86.8	95.3	95.9	99.1	98.2	93.8	91.4	85.4	100.8	87.9	80.9	92.2	86.5
10	107.0	99.7	130.6	154.0	160.7	157.9	164.1	146.9	132.5	153.7	150.5	133.9	130.1	129.3
11	9.3	9.1	5.8	11.6	15.1	14.2	17.2	24.6	22.0	20.8	16.8	16.9	15.9	15.2
12		5.4	5.2	5.4	9.0	11.1	13.4	16.7	15.5	23.4	24.2	19.6	17.7	16.7

NOTE Grade by grade enrolment data are available only from 1952. Consequently retention rates for higher grades could not be worked out for all the grades for all the years.

SOURCE Enrolment data supplied by the Statistics Division, Ministry of Education.

However, these figures are too global and over-simplified. They conceal many problems which need to be identified clearly before significant conclusions are drawn.

Lack of admission policy

It is an astonishing fact that there is no common legislation in Sri Lanka making education compulsory for all children between the ages of, say, 5 and 14. Admittedly, the absence of such legislation has not limited the development of education; it has, however, contributed to complicating the problem of age-grade relationships and creating fluctuations in the demand for places.

In September 1969, there were 415,897 pupils enrolled in grade 1,[1] their ages varying between 5 (103,061) and as much as 12 years old (60 pupils)!

Utilization ratios

We do not have any accurate statistics which can explain how any imbalances were settled, but there are good reasons to believe that it was in some cases with over-crowded classrooms, and in others with under-utilization of the school premises.

In addition, it is a well-known fact that the average attendance at school is about 80 per cent,[2] which means that the government provided some 20 per cent more places in school than was required, or that theoretically, with the same facilities, the government could accommodate 20 per cent more children.

This is due to numerous factors: the health of the pupils; the distance and the accessibility of the school; the seasonal activities on the farm; etc., and to some accessibility to school; the seasonal activities on the farm; etc., and to some extent it is beyond the control of the educational system.[3]

But other factors contribute to the under-utilization of school equipment and premises and result essentially from a lack of efficiency of the management and planning of the system. They are not uncommon in several countries of the world, but Sri Lanka gives a significant illustration. They are:

(a) lack of use of workshops (wood or metal) due to lack of teachers or equipment;
(b) under-utilization of specialized laboratory and science rooms due to insufficient size of schools;

1. Excluding estate schools.
2. A visit to a very small sample of schools made by the author of this paper tends to confirm this figure, and even suggests that it may be rather low.
3. 'An enquiry into reasons for non-attendance of schools by children in the age-group 5 to 14 made some years back throws interesting light on the problem. The study covered the years 1950-56 and identified the following reasons: poverty, 48.79 per cent; unattractive curriculum, 12.01 per cent; physical and mental handicapped, 7.81 per cent; lack of schools, 4.1 per cent; employment of children, 1.49 per cent; juvenile delinquency, 0.56 per cent; and reasons not given, 25.25 per cent.' *Internal report on reasons for non-attendance*, Colombo, Ministry of Education (mimeo), no date.

(c) over-staffing and under-utilization of facilities and equipment in some technical and higher educational institutions.

In this respect, the great dispersion of responsibilities in the field of technical and vocational education among various ministries and the organizations outside the government does not help to ensure a co-ordinated and planned policy in terms of technical and vocational training.

Retention, repetition and drop-out

One feature of the Sri Lanka educational system is that it allows repetition of grades a second or third time, and pupils can leave the school system any time during their training. This means that a pupil can spend six years in a school without reaching grade 3. This is not a hypothetical example, as Table 64 giving statistics on repetition rates and drop-out rates shows (see also Tables 15 and 16 in Appendix II).

In spite of some improvement in the repetition rates from 1967 to 1969 they remain fairly high, especially in grades 1 to 5.

Drop-out rates increase with the ordinal number of the grades. They are particularly high in second-level education and especially so in the arts stream.

TABLE 64. Repetition and drop-out rates by grade (percentage)

Grade	Drop-out 1967	Repetition 1967	Repetition 1969
1	1.5	22.2	28
2	2.3	22.0	19
3	3.4	23.9	19
4	3.3	10.4	20
5	5.5	14.1	18
6	5.9	14.0	8
7	5.7	12.8	9
8	5.3	13.0	11
9 arts	6.1	6.7	5
9 sciences	1.0	6.3	
10 arts	13.7	40.7	40
10 sciences	4.9	35.5	
11 arts	19.3	7.9	8
11 sciences	7.1	3.2	
12 arts	15.3	38.9	34
12 sciences	7.9	26.7	

SOURCE *Perspectives*, op. cit.

TABLE 65. An analysis of the results of the GCE 'O' level examination in Sri Lanka, 1968

	No. sat	No. passed	Percentage of passes	Passes expressed as a percentage of the corresponding age group
Sinhalese language (Syl. A & B)	180 567	129 733	71.8	47.6
Religious knowledge (buddhism, hinduism, islam, christianity R.C. and non-R.C.)	209 302	141 517	67.6	52.0
English language (Syl. A & B)	89 866	14 082	15.7	5.2
Arithmetic	162 830	33 301	20.5	12.2
Mathematics	51 742	19 730	38.1	7.2
History	108 013	30 563	28.3	11.2
Civics	107 467	31 094	28.9	11.4
Geography	79 886	23 814	29.8	8.7
Needlework	10 644	4 765	44.8	1.7
Agricultural science	13 770	7 245	52.8	2.7
Applied mathematics	12 792	6 101	47.7	2.2
Physics	49 848	21 715	43.6	8.0
Chemistry	51 065	21 645	42.4	7.9
Biology	47 779	20 675	43.3	7.6
Economics	21 503	8 146	37.9	3.0
Metalwork	888	571	64.3	0.2
Woodwork	2 709	1 287	47.5	0.5

SOURCE *Perspectives*, op. cit.

Low level of success at GCE 'O' level

Another indicator of the efficiency of the system is given by an analysis of the results of the GCE 'O' level examinations. The ratio of 'did not pass' to 'examined', though imperfect, can give some significant indications.

In 1968 the ratio of passes was over 50 per cent for Sinhalese language, religious knowledge, agricultural sciences and metalwork (see Table 65). For all other subjects, less than 50 per cent of the students who sat the examination passed. Moreover, in key disciplines like arithmetic and mathemathics, this ratio was as low as 20.5 per cent and 38.1 per cent.[1]

These figures mean that the GCE 'O' level examinations are either not adapted to the conditions of Sri Lanka, or are badly prepared, or that the students are not well trained. In all cases, the chances are that the schools system is inefficiently run.

One immediate effect of the low rates of success is that students repeat their grades in order to have another attempt at passing some subjects at 'O' level.

1. A comparison with the results of the 1965 examination (London) is available in Table 17 in Appendix II.

This, of course, is costly, as not only does it require more rupees to produce graduated students, but also it contributes to disorganizing both the schools and the grouping of pupils by grades.

Lack of co-ordinated policy for technical and vocational training

Technical and vocational training is provided by:

(i) Ministries (of Education, Labour, Lands, Irrigation and Power, Public Works, Defence and External Affairs, Health, Social and Nationalized services, etc.).

(ii) The public sector (state engineering corporation, electricity board, etc.).

(iii) The private sector (Walkeis and Sons, the Colombo Commercial Company, Brown and Co., etc.).

In fact, numerous institutions run courses and provide training for their own specific needs. In this respect, one might wonder how a national policy for technical education can be operated and controlled when the effective power of organizing the courses is so widely dispersed. An obvious example is that of agricultural education.

Sri Lanka is primarily an agricultural country, where more than 50 per cent of the labour force is employed in farming. Yet agricultural education has no clear-cut objective and is stimulating competition (with overlapping aims and functions) among various organizations, for example, the Ministry of Agriculture, the Ministry of Lands, Irrigation and Power, the Ministry of Education, the Faculty of Agriculture of Sri Lanka University, and the private sector. How, in these circumstances, can one expect the system to run efficiently, with no overlapping and with an optimum use of financial and human resources?

5. How effective is the system?

In assessing effectiveness one normally needs to evaluate the output of the system in relation to its objectives. In the absence of any specific objectives clearly and continuously decided by the government over the past decade, we will limit the scope of our discussion to two normally well-accepted general objectives:

(a) equality of educational opportunity among regions;

(b) ensuring that the output of the system is adapted to the national requirements.

Equality of educational opportunity among regions

This objective is not well enough defined to permit any accurate assessment. However, everyone would agree that a few indicators help in evaluating the effectiveness of the system in reaching some balanced development of education among the regions, for example, the pattern of enrolment, the qualifications of teachers, etc.

In this respect, Table 66 illustrates some persistent inequalities among the various educational regions. For example, the first two columns show that the development of enrolment varies significantly among the regions: from 6.2 per 1,000 inhabitants in Nuwara-Eliya and Mannar up to 15.7 in Galle. Similarly second-level schools enrolment (per thousand of the population) varies from 10.9 in Mannar up to 32.5 per cent in Galle. Columns 3 and 4 show the differences in terms of staffing conditions,[1] i.e. percentage of non-trained teachers, which is as high as 45.4 per cent in Kalutara and as low as 19.5 in Batticaloa, while the average pupil/teacher ratio oscillates around 29.3 with a minimum of 26.1 in Colombo North and a maximum of 36 in Nuwara-Eliya. Finally, the percentage of repeaters in grade 1 gives values between 17.5 in Colombo South and as much as 43.1 in the Trincomalee region.

TABLE 66. School indicators by region

	Grade 8 enrolment per 1000	Second level enrolment per 1000	Percentage untrained teachers (govt. schools)	Pupil/ teacher ratio	Percentage of repeaters in grade 1
Colombo South	14.2	27.6	39.9	28.5	17.5
Colombo North	14.0	27.6	33.8	26.1	28.3
Kalutara	11.1	28.5	45.4	27.6	26.2
Kandy	14.0	25.8	38.1	30.0	27.7
Matale	11.6	23.7	34.4	32.2	32.5
Nuwara-Eliya	6.2	19.2	30.2	36.0	30.3
Galle	15.7	32.5	49.6	27.7	24.1
Matara	15.0	32.2	48.1	29.9	28.2
Manbantola	12.0	25.1	37.3	34.2	28.9
Jaffna	15.6	29.4	22.3	30.0	29.0
Mannar	6.2	10.9	23.5	31.5	36.0
Vavuniya	7.7	16.9	23.3	29.0	35.3
Batticaloa	7.0	13.5	19.5	30.7	42.1
Trincomalee	7.0	14.0	30.8	33.2	43.1
Amparai	10.4	13.5	26.1	35.7	22.6
Kalmunai	6.0	13.5	25.3	28.8	37.9
Kurunegala	15.4	25.7	40.9	29.8	26.6
Puttaham	15.4	26.0	39.9	29.1	31.4
Anuradhapura	11.3	24.5	36.3	29.5	32.9
Polonnaruwa	9.9	21.6	31.2	35.1	26.4
Badulla	7.6	13.6	31.4	29.1	27.7
Monaragala	7.3	12.0	26.0	35.8	32.3
Kegalla	14.5	31.3	45.2	26.7	28.5
Ratnapura	10.6	20.6	37.6	30.5	28.0
TOTAL	12.7	26.8	38.0	29.3	27.9

SOURCE *Medium-term plan*, op. cit.

1. See also Table 18 in Appendix II.

Education and employment

Another indicator of the effectiveness of the system can be obtained by examining what happens to those who leave the system at different levels of educational attainment, i.e., do they find a job immediately they leave school? Are they earning what they expected? This raises the whole issue of the educated unemployed in Sri Lanka.

Unemployment is an acute national problem for the country today, but much more acute among the educated, as Table 67 shows.

TABLE 67. Educated unemployed in 15-24 age group, 1969

Level of education	Percentage	Level of education	Percentage
No education	18	Grades 11-12	84
Grades 1-5	28	University, science	2
Grades 6-8	47	University, arts	50
Grades 9-10	72		

SOURCE E.L. Wijemanne, 'Youth and education', paper given at a seminar on *Problems of youth in developing countries*, Colombo, 2-12 January, 1972.

The figures in Table 67 indicate that not only is the educational system of Sri Lanka not producing an output fitting in with its employment requirements, but more than that, it looks as though its effect is just the opposite; i.e. the more educated you are, the less chance you have of being employed (if you are in the age group 15-24).

This fact is dramatically illustrated by the results of a questionnaire mailed by the Ministry of Planning to a sample of 2,081 undergraduate students. In reply to the question 'Do you expect to find a job within, say, two or three months of graduating?' only 31 per cent of holders of the B.A. said 'yes' (71 per cent of B.Sc. holders).[1]

Perhaps it is appropriate to quote at this stage and as a conclusion to this section the *Five-year Plan* of Sri Lanka.

> 'The basic shortcoming of the country's educational system is that the academic type curricula are framed to cater to the needs of that small minority of the output of the educational system who, having reached the GCE 'O' level, compete for the very small number of jobs available as doctors, engineers, administrators or teachers. Of the others, a small number obtain employ-

1. About seventy miles from Colombo, I met two young men sitting in the shade of a kiosk. One was trying to sell produce from his garden, the other was simply chatting and sitting there. I was told by my driver that 'the man selling left school at grade 5, his brother sitting beside him has passed his GCE 'A' level last year and is unemployed'.

ment in the clerical, technical and service occupations, while the rest begin the interminable wait for the white-collar jobs that are not there. Judging from results, it is no exaggeration to say that the social returns to educational investment have been negligible, if not negative'.[1]

It is with this last quotation in mind that we will now turn to the examination of the future of the educational system in the framework of the new educational reform.

1. *Five-year plan*, op. cit.

D. The educational system in the 1970s

Having briefly discussed the economic trend in the coming decade, we would like to examine in this section the role of education within the strategy of development adopted by the government, while section E will assess the financial implications of the reform of the educational system introduced in 1972.

For this purpose, we will discuss first the characteristics of the new system, and follow this by an analysis of its implications in terms of enrolment and staffing.

1. The new educational system

In the preparation of the first medium-term plan for 1972-76 the Sri Lanka planners made a critical diagnosis of the educational system and used it as a guideline for the reform. The main conclusions of the diagnosis were the following:

(a) Education is not playing its role as a factor of development, as its output is not fitting in with the socio-economic requirements of the country. In spite of a policy of expansion of science and technical education and quality improvement in second-level education, which was followed during the last decade, unemployment is becoming more and more common among the educated, and it seems as if the country is over-producing the wrong type of educated labour.

(b) Education is one of the major sectors of the economy, but it is run in a very inefficient manner. Heavy repetitions, drop-outs (especially in the early stages of schooling), under-utilization of staff, equipment and facilities are all significant indicators of a badly-managed system.

(c) In spite of the improvement of education in Sri Lanka during the last twenty to thirty years, (namely the introduction of free education, the adoption of Sinhala and Tamil as the media of instruction, and the unification of the school system), imbalances in the supply of education between urban and rural areas, and between developed and less-developed parts of the country continue. To this extent the system is not effective in responding to the popular demand for equalization of educational opportunity.

With these conclusions in mind, the three broad objectives of the medium-term plan for educational development are stated as follows:

(i) At all levels of education, and in both general education and technical education, to make the content of education reflect to a greater degree those forms of education needed for the accelerated growth of the country's economy. This has to be done without violating the broader objectives of education.

(ii) To achieve greater internal efficiency within the education system, in particular by reducing drop-outs and repetitions, while maintaining educational standards and to institute regular feedback and review of the different parts of the system.

(iii) To further the concept of equality of educational opportunity by reducing regional imbalances in the provision of educational facilities, as well as other steps such as changes in the structure of the school system.

Perhaps we should note at this stage that these three objectives are nothing exceptional, in as much as they can be adopted by any educational system in any country. Indeed, one has encountered similar statements in several national plan reports. But what seems to be most interesting in the case of Sri Lanka is that not only clear objectives are stated but also radical decisions are made to reach these objectives. This attempt to link means and ends is quite rare, as is the attempt to take the steps for achieving them. It deserves encouragement and sympathy and should be heavily emphasized.

The reform proposals

More explicitly, the Sri Lanka planners have designed a new system of education which should, logically, help to reach the three broad objectives adopted by the government.

Figure 2 describes the main features of the new system. Several comments can be made:

(a) The general education programme is restructured very significantly and its duration is reduced from twelve to eleven years. In order to ensure some maturity for children reaching senior classes, and to let them leave the school system as late as possible (i.e. at 14 rather than at 13), the age of admission is raised from 5 to 6 years.

(b) First-level education will comprise grades 1 to 5 only. For these grades non-specialist teachers are required, and it will be possible to reorganize an extensive network of schools (including one-teacher schools) situated close to pupils' homes. This will help increase the participation rates for the 6 to 10 age groups from 85 per cent in 1969 to 93 per cent in 1980. The very heavy repetitions prevailing particularly in the lower grades (Table 64) are eliminated by introducing automatic promotion in grades 1 to 4 and 6 to 8. The proportion of repeaters for grades 1 to 5 will decline from 20 per cent in 1970 to 3 per cent in the last years of the decade. Thus the average time spent in completing grades 1 to 5 would fall from 6.3 years to 5.1 years.

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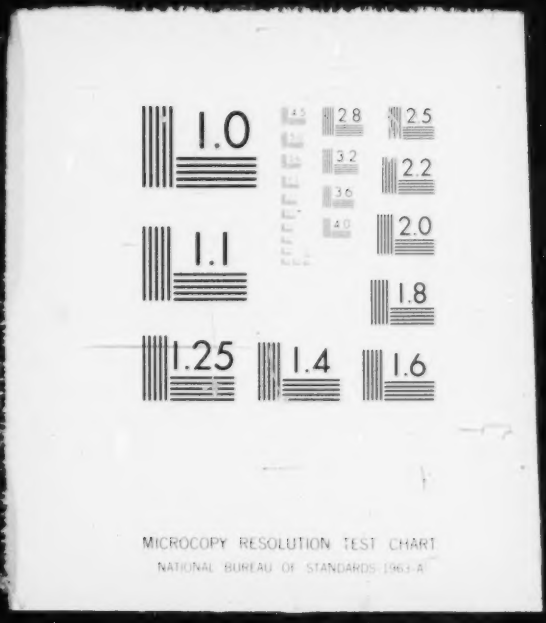

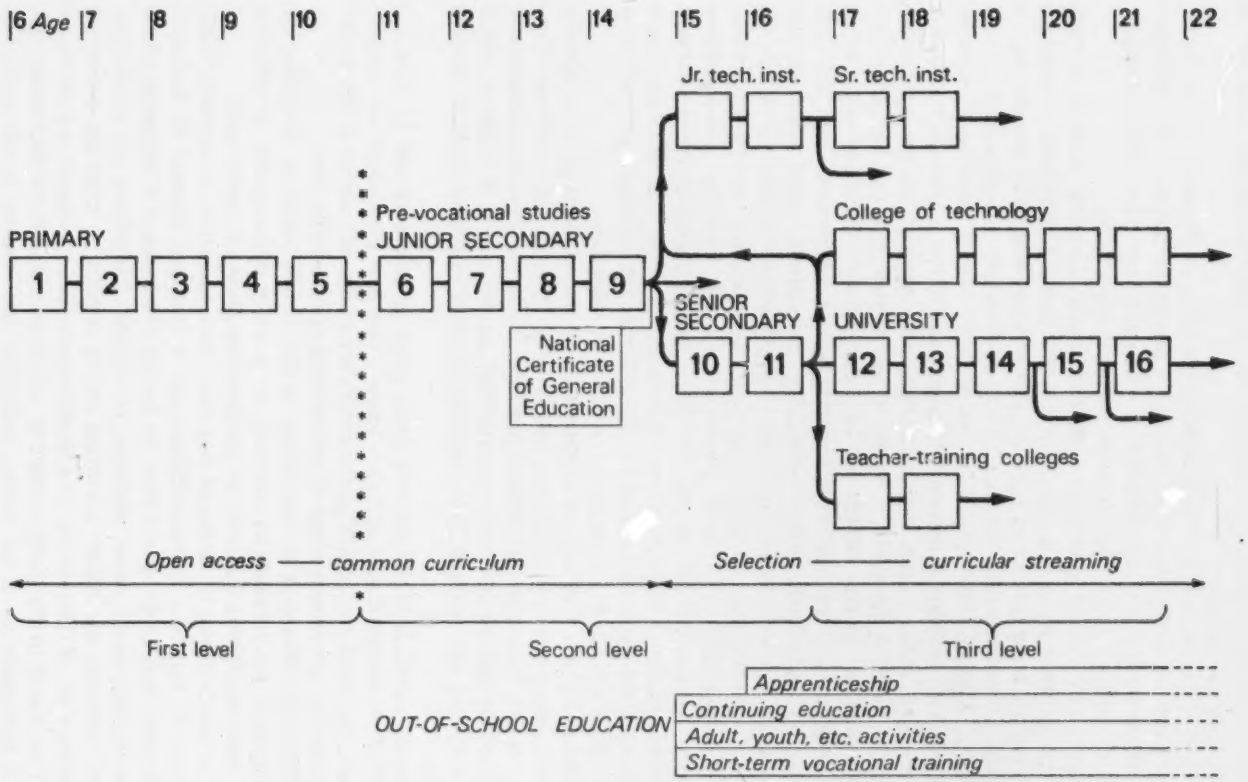

FIGURE 2. *The new educational system of Sri Lanka*

The first-level education programme will be enriched by the *promotion of activity-based methods.*

These changes can lead to increasing the internal efficiency of the system by saving resources, to improving the external productivity of education by preparing children 'attitudinally to undertake later productive vocations' and to ensuring more equality of educational opportunity.

(c) Junior second-level education is of four years' duration (instead of two) extending from grade 6 to grade 9. The new junior second-level programme will require some specialized facilities, and as many schools as possible should obtain a multipurpose 'practical' room (laboratory or workshop). Those schools without this 'practical' room will receive equipment suitable for use in an ordinary classroom. All pupils will follow a common curriculum of sciences, social studies and humanities, with emphasis on the application of these fields to the world of work. A new subject area will be introduced: 'pre-vocational studies', which will be a compulsory subject and will include teaching sessions dealing with important local occupations, e.g., fisheries, cash-crop agriculture, animal husbandry, horticulture, retail trade, cottage crafts, etc. In order to ensure that these subjects are not considered as 'second choice' the National Certificate of General Education examination (which will replace GCE 'O' level examinations) will consider 'pre-vocational studies' as essential for success. The National Certificate of General Education examination will not be a 'pass-fail' examination but will offer a certificate indicating the pupil performance in the different subject areas, and will serve as a basis for admission to senior second-level education.

These changes will help to eliminate the major weaknesses of a selective system which works by streaming and privileging pupils with academic training. It will minimize the difficult problem of divorce between occupational aspirations and occupational opportunities, ensure saving in terms of length of schooling and promote better equality in terms of school facilities between areas.

(d) Senior second-level education is to be given in grades 10 and 11. Grade 9 will be the terminal year of 'open access'. The new curriculum will prepare pupils for either the diverse post-second-level system of training or for vacancies among appropriate areas of employment at the middle level.

The main advantage of this change is that it will contribute to easing the problem of entry failure to university by opening opportunities for entrance to post-second-level institutes or middle-grade areas of employment.

(e) The restructuring of technical and third-level education is currently under review. A National Training Officer and a National Council of Technical Education and Training will plan the further development of technical education. As regards third-level education, conditions of admission will be changed. Both technical and higher education should develop to meet the manpower requirements of the country. In a quantitative sense, enrolment in each course will be related to the likely number of vacancies arising in the field concerned. In a qualitative sense, all studies, including 'arts' streams in the university,

will include vocational and pre-vocational options. The universities of the country are merged into one single university: the University of Sri Lanka.

(f) Out-of-school non-formal education and pre-first-level education will not be developed on a broad basis in the country. Kindergartens will remain the initiative of local authorities or private organizations.

Continuing education will be provided on a modest scale by the university and on an *ad hoc* basis by public or private organizations. The only major and significant decision is the 'national apprenticeship scheme' created by Act No. 49/1971, with a budget of 9.3 million rupees (1971/72). The purpose of this programme is to formulate, implement and supervise a scheme of on-the-job training in co-operation with employers. The object is to help young people of the 16-18 age-group to obtain a vocational training and better employment opportunities.

The difficulties of implementation

These are numerous, and the educational authorities of Sri Lanka are well aware of the obstacles to full implementation. Yet they have put their trust in the success of the reform. In our view the chances are, however, that unless very adequate institutional, political and financial decisions are made, the implementation of the plan will remain superficial and will not contribute to reaching the national objectives. Moreover, even if radical decisions are taken to ensure a successful implementation of the plan, behavioural, social and economic factors can lead to a slowing-down, if not distortion, of the original pattern adopted by the government.

To test the feasibility and the chances of implementing the decisions made, it is necessary to discuss them briefly from different angles related to each component of the educational system of Sri Lanka. These are: the facilities and equipment; the teachers; the headmasters and supervisory staff; the pupils and their families; the government and the managing authority. We shall leave out the economic and financial aspects for the moment, as the next section will deal with them more extensively.

FACILITIES AND EQUIPMENT

The restructuring of the school system requires a reorganization of the whole school network to provide facilities suited to the new definition of first level, junior second level and senior second level. At present, out of 8,748 first-level and second-level schools, only 743 provide courses from grades 1 to 5. There are 5,281 schools which provide courses from grades 1 to 7, which will have to reconvert their facilities to suit the new requirements. This could leave several schools with an under-utilization of their premises and others with new building requirements. A national school mapping programme is thus a prerequisite for ensuring rationality in the efficient use of premises.

With regard to equipment, the introduction of new curricula at the junior second level cannot be achieved unless adequate provision is made for pre-vocational studies. Admittedly, it is planned to provide a substantial number

of schools with equipment for multi-purpose rooms (woodwork and metalwork), but this equipment is not sufficient to provide adequate pre-vocational training with emphasis on economic activities in the neighbourhood of the schools. However, UNICEF aid has been negotiated and equipment is being supplied. It will be noted that total enrolment should not increase heavily over the next decade and some resources will be utilized for improving the physical plant in schools. In this respect, it is assumed by the authors of the plan that local initiative will be encouraged to equip the schools for pre-vocational training. How far is this assumption realistic? Only experience will show.

THE TEACHERS AND SUPERVISORY STAFF

The usual criterion for classifying teachers (by specialist/non-specialist) is not suitable and is probably less relevant than another criterion, i.e., the number of teachers able to provide pre-vocational training compared to other teachers. In this respect the first reactions of the teaching force to the government proposals are difficult to assess but easy to imagine. Are they trained enough to teach vocational subjects? Why should they do it if they are paid no more? Will they not lose their prestige and status in becoming 'untrained craftsmen'? Can they accept being trained by local workers? Etc.

Whatever the teachers' attitude, a prerequisite for a successful implementation of the plan is careful organization of in-service training for at least 30,000 teachers, combining different formulae for training. In this respect, needless to say, if the teachers have no confidence in the new reform, and if they are not trained to perform their tasks adequately, it would be unwise to expect a successful implementation. The educational authorities may succeed in changing the structure of the system from '8-2-2' to '5-4-2', and in officially altering its content, but this alone cannot ensure a different output from the system.

With regard to supervision, are there enough supervisory staff to guide and control the implementation of the new curriculum? Are the school inspectors adequately trained to help the teachers in the new subject areas? Are they ready to be the 'agents of change' and to play their role as the 'communication tool' between Malay Street in Colombo [1] and each of the 10,000 institutions in the country?

THE PUPILS AND THEIR FAMILIES

The success of the educational reform will depend to a large extent on the degree of commitment and involvement of parents and children. Parents must be convinced that the new educational system has been designed in the interest of the country in general and of their children in particular. Some difficulties will arise here, in the sense that several parents send their children to school in the hope that education will help them to obtain better conditions of living (by escaping from the jobs of their fathers), while the explicit objective of the new system is to encourage pupils to remain in their family setting and

1. The headquarters of the Ministry of Education.

work in their local milieu and become self-employed. Under these circumstances, is it reasonable to expect the parents to give full support to the reform and, moreover, to contribute financially to its implementation by sharing the costs of organizing the pre-vocational studies, as it is implied by the plan? How long will it take to convince parents that it is in the interest of their children to create their own employment opportunities by colonising new land (the total available land for agriculture is necessarily limited), or by multiplying the activities in their local environment? In the Five-year Plan, in fact, the government decided to take all necessary action to develop the opportunities for self-employment; but only when such action is achieved will the pre-conditions for the success of the educational reform become evident.

THE GOVERNMENT AND THE MANAGING AUTHORITY

Putting aside the conflicts and competitions that arise between political groups when a school siting and location programme is envisaged—these are common to all countries—the implementation of the plan will lead to formidable organizational tasks which require a continuous and strong co-operation among administrators at all levels of responsibility. This is needed for designing the curricula, reorganizing the schools, allocating the teachers, providing the facilities, selecting the students, etc. Moreover, the task of enriching the curriculum and relating it more closely to local activities will require an interlinked system of responsibilities, from the central government to the local practitioners of different occupations. Finally, the introduction of 'pre-vocational' studies in the National Certificate of General Education examination will raise several organizational problems; for example, different geographical areas will have different occupations to teach, and different occupations will involve different workloads for purposes of study.

Thus a composite process of decision-making, which will tie the currently centralized system with a very decentralized pattern of educational responsibility, will have to be invented. This will take time, and to some extent can be a factor of inertia against the successful implementation of the plan.

In brief, it would be too naïve to expect a smooth and easy procedure for implementing the government's educational proposals to emerge. On the contrary, several difficulties are likely to appear, and unless a careful strategy for implementation is prepared the train of reform will be derailed before starting on its journey. It is with this conclusion in mind that we will now turn to the implications of the reforms in terms of staffing and enrolment.

2. Staffing and enrolment

The changes introduced in the structure of the curriculum of schools and in the procedures for admission and preparation of pupils will have a significant impact on the size of the enrolment and its distribution by level and type of education. It is, of course, difficult to judge accurately the impact of the reform on the

demand for education from individuals and families, and even more so on the time-lag between putting the government proposals into action and observing their effect on the behaviour of the social groups involved.

Consequently, and for the sake of simplification, all the estimates wich will be given in this section [1] are made in respect of the purely mechanical effects of the reform. They take for granted that the plan will be implemented according to the schedule of the Ministry of Education.

The hypotheses

The hypotheses which are made in the forecast are as follows:

At the first level the raising of the age of admission from 5 to 6 will be fully achieved, starting 1972/73. The admission ratio to grade 1 will be 97 per cent in 1980. The participation rates will be 96 per cent, 93 per cent, 90 per cent and 88 per cent for the ages 7, 8, 9 and 10 in grades 2, 3, 4 and 5. Automatic promotion in grades 1 to 4 and 6 to 8 will be in operation. There will be a very small drop-out rate and no repetition except in grades 5, 9 and 11, where the repetition rates will be 20 per cent.

At junior second level 80 per cent of the pupils enrolled in grade 5 will be admitted to grade 6; no repetition rates in grades 6, 7, 8, but 50 per cent in grade 9. The drop-out rate will be very small.

In the case of senior second level two hypotheses are made: if the 'manpower requirement' is the basis for planning the admission total enrolment should remain at the same level as today, if not decline. As present senior second-level enrolments already seem in excess of manpower needs, another hypothesis is made by the educational planners of Sri Lanka, i.e. a constant admission ratio of 10 per cent from grade 9 to enrolment in senior second level.

With regard to technical and vocational education, according to the medium-term plan, the enrolment should be based on the manpower requirements of the country. In this respect the uncertainties are such that any estimate can be subject to criticism.

At the moment there is no systematic and comprehensive statistical information in Sri Lanka relating employment and education; very little evidence on labour productivity by sector of production; almost no valid employment matrix; etc. Therefore it is difficult to forecast accurately enrolments in technical education for craft, technical and technological levels. But in order to give an indication of the size of the enrolment at the various institutions of technical education, some arbitrary assumptions are made. On the whole it will be twice as high as in 1970. This is consistent with the recent decision of the government concerning the National Apprenticeship Scheme; it provides more opportunities for technical training to some of those who would fail to enter the university after grade 11, and helps to prepare them for employment.

1. Based upon studies undertaken by the Ministry of Education and on the *Medium-term plan*, op. cit.

The present rate of output of general trained teachers would seem to be sufficient to meet the requirements. But in the case of specialist teachers it will be necessary to expand the capacity of the enrolment to meet such requirements (see page 109).

So far, very little evidence is available regarding the government's intentions concerning the development of third-level education. It is therefore not possible to make any hypothesis forecasting university enrolment. But if we accept the proposals of the medium-term plan, admission at the third level of education will be based on manpower requirements. This would lead to the stabilization of entrance to the arts stream and to some increase in the other streams. In addition, it appears that the government is planning to create regional colleges to avoid large concentrations of students in big campuses and to ensure better equality of educational opportunity among the regions. This will lead, on the whole, to some significant increase in the total enrolment.

The enrolments

AN OVERALL VIEW

It should be noted that if the main principles of the medium-term educational plan are accepted, and the changes are successfully introduced in the system, their impact on enrolment will be very significant. The total enrolment for the first and second level will decline from 2,760,000 in 1970 to 2,514,000 in 1973 and gradually increase to 2,551,000 in 1967. After the end of the medium-term plan an increase in enrolment can be expected. Because of the size of enrolment at various levels, and the differences in the accuracy of the forecasts, it is preferable to analyse the determinants of the enrolment trend by making two separate investigations; one for enrolment from grades 1 to 9, and one for enrolment beyond grade 9. In the case of technical and third-level education, in fact, the lack of adequate manpower requirement forecasts necessitates making arbitrary assumptions in estimating the enrolment trend. The outline of the forecasts is described briefly in Table 68 which compares the enrolment in 1970, 1976 and 1980.

DETAILED ESTIMATES FOR ENROLMENTS IN GRADES 1 TO 9

In using the demographic projections made by the Ministry of Planning and Employment, assuming the admission, promotion and participation rates given in the plan, and considering that the new system of training in junior second level has started in grade 6 from January 1972, the Sri Lanka planners have obtained the enrolments given in table 69.

This table indicates quite clearly the determinants of the total enrolment trend. Starting in 1972, with the change in the age of admission from 5 to 6, grade 1 enrolment would be exceptionally small (almost one quarter the normal intake). This anomaly will contribute to reducing the enrolment in first-level

TABLE 68. Enrolment forecast

	1970	1976	1980
First level (grades 1-5)	1 746 463	1 450 000	1 819 000
Junior second level (6-9)	896 495 [1]	1 023 000	1 019 000
Senior second level (10-11)	46 680 [1]	47 000-82 000	47 000-69 000
Technical & vocational	13 000 [2]	20 000 [2]	25 000 [2]
Teacher training	7 296 [3]	9 500 [5]	9 000
Third level [4]	12 294	14 000-15 000	15 500-18 000
TOTAL	2 722 228	2 563 500-2 599 500	2 934 500-2 959 000

1. Junior second level, grades 6-10; senior second level, grades 11 and 12.
2. Equivalent full-time; all institutions.
3. 1971.
4. Including post-graduates, and enrolment at Sri Lanka College of Technology.
5. Of which 800 correspondence courses.

SOURCE IIEP estimate and *Medium-term plan*, op. cit.

TABLE 69. School enrolment, all agencies, including private and estate schools (thousands)

Grade	1971	1972	1973	1974	1975	1976	1977	1980
1	454	*150*	330	338	348	355	361	383
2	378	378	*143*	306	317	329	340	371
3	346	346	340	*130*	299	309	321	352
4	294	294	311	309	*120*	292	302	333
5	275	305	305	331	336	*165*	309	380
6	223	223	208	230	253	259	*134*	298
7	220	220	201	189	212	235	243	276
8	210	210	198	183	174	197	221	221
9	119	189	189	180	168	246	266	224
10 (old system)	194	194	242	270	261	86	—	—

SOURCE Ministry of Education, Colombo.

education for five years (during the medium-term plan). After 1976 the effect of this change will be on the enrolments in junior second level until the end of the decade.

In addition, over the medium-term plan period two generations of pupils will co-exist: those who were enrolled before the reform and those since. It means that some pupils enrolled in the former system will continue to sit for the entrance examination to senior second level at grade 10 until 1976.

It is only after 1980 that changes in the size of enrolment will be determined by demographic factors alone, supposing the repetition rates remain constant. The 'open-access' enrolment by then will be about 2.8 to 2.9 million pupils and the enrolment ratio 96 per cent in first level (grades 1 to 5), 73.8 per cent in junior second level (grades 6 to 9), and 86.6 per cent for the whole 'open access' system.

DETAILED ESTIMATES OF ENROLMENTS IN POST-JUNIOR SECOND LEVEL

Table 70 describes in some detail the evolution of enrolment in senior second-level, technical, vocational and third-level education.

According to the estimates and to the hypotheses made, total enrolments in post-junior second-level education will increase by 21 per cent to 52 per cent. If the growth of the enrolment is planned only according to manpower requirements, they need not grow by much more than 20 per cent. The higher estimates leave room for some flexibility to meet the 'social demand' for schooling.

TABLE 70. Enrolments in post-junior second-level education [1]

	1970	1980
Senior second level	47 000	47 000-69 000
(Grades 11-12 in 1970, 10-11 in 1980)		
of which science stream percentage	33.4	40
first year:	19 000	22 000-32 000
second year:	28 000	25 000-37 000
Technical and vocational	13 000	25 000
of which, agriculture:	1 500	2 000
commerce:	3 600	6 000
industries and services:	7 900	17 000
Universities and colleges	12 300	15 500-18 000
of which, arts:	8 100	8 100
medicine, dentistry:	1 500	1 600-1 700
science:	1 100	3 000-4 000
engineering:	500	1 000-1 300
others:	1 100	1 800-2 900
Teacher training	7 300	9 000
TOTAL	79 600	96 500-121 000

1. Rounded figures.
SOURCE IIEP estimate.

However, on the whole, total enrolment in post-junior second level would not represent more than 4 per cent of total enrolment at all levels. In spite of the variety of courses offered and the number of different institutions involved, in spite of the very high cost of training at this level, and of the role of this training in responding to manpower requirements (in technical, vocational, teacher training and universities), it still represents a very minor share of the total enrolment in the school system, and this should be kept in mind when assessing the implications of the educational reform on solving the unemployment problem faced by the country.

THE EMPLOYMENT CHALLENGE

It is appropriate at this stage to raise the following question: will the implementation of the educational reform contribute to easing the unemployment crisis in Sri Lanka?

To some extent the impact of the reform will undoubtedly be beneficial. In particular, by introducing the pre-vocational training (grades 6 to 9), and by developing post-junior second-level schooling in relation to manpower needs, the new system will have an output better fitted to the requirements of the labour market. A better equilibrium will thus be achieved between education and employment.

However, it is well-known that to achieve an equilibrium between educational output and labour requirements it is not enough to produce the right quality of output. The economy should also have the capacity to absorb the annual output of the educational system. From this aspect, if no great difficulty can be expected in the case of the output of post-junior second-level institutions (some 20,000 to 30,000 at the best), it is a very different matter for students who have completed between five and nine years of schooling. To illustrate the matter with some numerical estimates, it is to be noted that if the reform is successfully introduced, the annual 'output' of the system by 1980 will be as follows: 10-14,000 completed grade 5; 8-12,000 completed grade 6; 8-12,000 completed grade 7; 8-12,000 completed grade 8; about 150,000 completed grade 9. This means that a total of 184,000 to 200,000 entered junior second level, of whom about 20,000 moved on to post-junior second level.

The crux of the matter therefore is to check whether the economy can absorb every year about 200,000 pupils who have completed between 5 and 9 grades, yet are without any specialized training. This is, in fact, far beyond the capacity of the economy during the coming years. (See Part I, section B.) Being aware of this argument, the government decided in its new development strategy to promote a number of programmes for creating and encouraging the expansion of 'self-employment'. For this purpose, in the educational reform, pre-vocational studies have been introduced with a focus on local conditions. To implement this programme successfully, however, the financial requirement seems to be much higher than is suggested in the plan (see section E).

The teacher requirements

Owing to the fact that technical, vocational and third-level education are currently under review and that it is not yet known how they will be reformed, and also in view of the relatively small number of teachers involved for these categories of training, the estimates given below are limited to the staffing requirements for first-level, junior second-level and senior second-level education.

THE HYPOTHESES

The estimates are based upon studies made by the Planning and Programming Division of the Ministry of Education, including the 'Medium-term plan for the development of education 1972-76'. The hypotheses are as follows:

(i) For government schools, two sets of assumptions regarding the pupil/teacher ratio are made:

	Set A	*Set B*
First level	34	30
Junior second level	28.75	25
Senior second level	25	20

(ii) In the case of grades 1-5 enrolment, one extra remedial teacher per five classroom teachers is required.

(iii) Wastage rates per annum are: 2.5 per cent for graduate teachers; 1 per cent for specialist-trained teachers; 3 per cent for general trained teachers; and 2 per cent for other teaching staff.

(iv) Teacher requirements are assumed to be distributed by subject areas in proportion to the time allocation for each subject in the new curriculum.

(v) Estimates of the medium-term plan are to be increased by: 6 per cent at junior and senior second level to take into account the requirements for principals and headmasters; 6.5 per cent at first level to take into account requirements of non-government institutions; 3.5 per cent at junior second level for requirements of non-government institutions; and 9.3 per cent at junior second level for non-government institutions.

THE RESULTS

The results are summarized in Tables 71-74. In order to estimate the teacher-training effort needed in 1980, the period is extended until 1981.

TABLE 71. Additional teacher requirements for first- and second-level grades in government schools, 1971-81

	Additional second-level (graduates and specialist) teachers required		Additional first-level teachers required		Total additional teachers required	
	Using pupil/teacher ratios		Using pupil/teacher ratios		Using pupil/teacher ratios	
	Set A (i)	Set B (ii)	Set A (iii)	Set B (iv)	Set A (i) + (iii)	Set B (ii) + (iv)
1971	16 091	21 341	−16 098	−8 763	(−7)	12 578
1972	18 700	24 330	−14 501	−8 148	4 199	16 182
1973	19 140	24 780	−13 175	−6 815	5 965	17 765
1974	20 090	25 890	−12 136	−6 842	7 954	19 048
1975	21 300	27 300	−10 184	−3 789	11 116	23 511
1976	21 020	26 990	−7 500	−1 015	13 520	25 975
1977	16 280	21 500	309	7 320	16 589	28 820
1978	17 670	23 060	4 688	12 459	22 358	35 519
1979	19 920	25 530	8 113	16 202	28 033	41 732
1980	21 970	27 860	11 469	19 791	33 439	47 651
1981	25 230	31 590	14 720	23 226	39 950	54 816

SOURCE *Medium-term plan*, op. cit.

TABLE 72. Estimation of additional requirements for second-level teachers (grade 6-11) by subject areas in 1981

	Pupil/teacher ratio Set A			Pupil/teacher ratio Set B		
	Total teacher needs	Residual teacher stock	Additional teacher requirements	Total teacher needs	Residual teacher stock	Additional teacher requirements
Science/maths	10 795	3 370	7 425	12 550	3 370	8 180
English	5 685	2 460	3 225	6 540	2 460	4 080
Pre-vocational	6 444	1 520	4 924	7 630	1 520	6 110
Aesthetic studies	2 842	1 660	1 182	3 270	1 660	1 610
Arts, religion, mother tongue and social studies	11 932	5 980	5 952	13 640	5 980	7 660
Health and physical education	2 842	(.)	2 842	3 270	(.)	3 270

TABLE 73. Output of specialist teachers and deficit in 1981

	Output per annum	Output over 10 years	Deficit relative to calculated requirements[1]	
			Set A	Set B
Science/maths	350	3 500	3 900	4 700
English	450	4 500	—	—
Pre-vocational	300	3 000	1 900	3 100
Aesthetic studies	—	—	1 200	1 600
Arts, etc.	—	—	5 950	7 700
Health, etc.	15	150	2 800	3 100

1. Rounded figures.
SOURCE *Medium-term, plan* op. cit.

TABLE 74. Staff requirement in 1981

	Set A		Set B	
	Government schools	All schools staff	Government schools	All schools staff
First level	64 694	68 200	73 200	77 960
Junior second level	37 900	41 580	43 600	47 830
Senior second level	2 640	3 050	3 300	3 800
TOTAL	105 234	113 530	120 100	129 590

SOURCE IIEP estimate based on *Medium-term plan*, op. cit.

If teacher requirements are compared with the capacity of teacher-training institutions, it appears that the present output of general trained teachers — about 2,500 per year—will be sufficient to meet the estimated needs for such teachers; though during the coming few years it will be necessary to provide on an *ad hoc* basis 'a three-year course of correspondence training to improve the skills of teachers who are untrained and who may find it difficult to attend a teachers' college'. In the case of specialist teachers, on the other hand, there is a clear need for expansion (see Table 72), and some new programmes will have to be planned to help satisfy the needs. Finally, a considerable number of graduate staff will have to be recruited, to serve particularly as principals as well as teachers in some subject areas.

On the whole, the enrolment in teacher-training institutions will vary as shown in Table 75.

TABLE 75. Teacher education: estimated enrolment (thousands)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Year 1	4.1	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5	4.5
Year 2	3.6	4.1	4.2	4.3	4.4	4.5	4.5	4.5	4.5	4.5
TOTAL	7.7	8.3	8.5	8.7	8.9	9.0	9.0	9.0	9.0	9.0

SOURCE *Medium-term plan*, op. cit.

Having assessed the likely evolution of staffing and enrolment over the 1970s, it is now time to estimate the costs of this educational development in order to test its financial feasibility. This is the purpose of the final section.

E. Conclusions: cost and financing of education in the 1970s

The mechanical effect of the school reform on the cost of education is not difficult to visualise.

The raising of the admission age from 5 to 6, the shortening of first-level schooling from eight to five grades (with the introduction of automatic promotion in some grades), will lead to a significant saving on the total first-level education current budget. But part of this saving will be compensated for by the increased participation of the children in the age group 6-11, and by quality improvement in grades 1 to 5.

The doubling of the duration of *junior second-level* education (from two to four years), the introduction of pre-vocational studies in grades 6 to 9, and the inclusion of science in all of these grades will lead to a significant increase in the current budget devoted to this level of education. On the other hand the reduction of 'open access' from ten to nine years will be a factor of cost-saving. All things being equal, and even if unit expenditures per pupil enrolled remain constant, the increase of the size of enrolment will automatically affect the cost and thus the financial requirements.

In the case of *senior second level*, no noticeable changes in cost are to be expected; in *technical* education, *teacher training* and *universities and colleges*, some increase in cost will result from the growth in enrolment and the change of its composition (with more enrolment in costly technical, vocational and science streams).

In addition, the factors which determine cost changes will operate over different time periods.

Thus, on the whole, the mechanical effect of the school reform on educational cost will be: a decrease in the proportion of the budget going to first level; a major increase in the proportion allocated to second level; and some increase in the proportion devoted to the other sectors of education.

However, a more accurate analysis is needed if a genuine assessment of the cost of education in the coming decade is to be made. The analysis should examine the cost consequences of each component of the reform, i.e., postponing the admission age from five to six years; introducing some practical teaching in grades 1 to 5; introducing the automatic promotion system; altering the promo-

tion rates in grades 6 to 9; changing the school curriculum by introducing common subjects; phasing in the pre-vocational studies in grades 6 to 9; replacing the GCE 'O' level examination by the National Certificate examination; training and up-dating the teaching force; introducing a selective system of admission after grade 9; putting emphasis on admissions to science departments and on training for practical subjects in third-level education; etc.

Unfortunately, available data do not permit very detailed analysis, and indeed information is totally lacking on the financial implications of some decisions of the reform. None the less, we have taken the risk of making cost estimates, even though they are no more than arbitrary 'guesstimates'.

In this respect, a few of the hypotheses of the medium-term plan concerning cost seem to be highly disputable. For example, it has been assumed that a good share of the cost of introducing the pre-vocational studies in junior second-level education will come from parents and local authorities, who would provide for physical requirements, and teaching will be given on a voluntary basis. This is quite possible as an eventuality, but its likelihood should be tested and examined. The alternative is that if no adequate financial provision is made for the qualitative improvements introduced by the reform — and quality is normally expensive—there is a considerable risk that the most strikingly positive elements of the reform will never be really implemented.

It is with such considerations in mind that the following cost exercise was undertaken.

1. The cost of education around 1980

The purpose of this section is *not* to make a detailed financial plan for the coming ten years but merely to sketch out a prospective estimate of the cost of education at the end of the decade. We will therefore avoid preparing any cost estimates over the transitional period of the introduction of the reform (such as: cost of retraining the teachers; of preparing the new curriculum; of designing the National Certificate of Education examination; etc.). In the following section it will be assumed that the reform has been fully implemented by 1980, and that no 'occasional' costs due to these changes are to be expected by then.

The hypotheses and the methods

All estimates are made in 'real terms', that is to say, in constant 1972 prices, adjusted to take into account relative price changes. The capital cost estimates of the medium-term plan are adopted in this study.

FIRST AND SECOND LEVEL

Cost estimates are made separately for staff costs and other current costs.

In the case of first level, and junior and senior second level, staff costs are estimated for the two hypotheses of staffing formulae given on page 107. Table 76 shows the staff requirements.

TABLE 76. Staff requirement in 1980 (for first level, junior second level and senior second level, on the basis of two pupil/teacher ratios)

	Set A	Set B
Total teachers: First level	62 720	71 040
Junior second level	35 460	40 760
Senior second level	3 000	3 750
Total all staff including principals	104 990	119 920
of which: Principals	3 810	4 370
Graduates	20 730	24 130
Specialist	17 730	20 380
Non-specialist trained	36 450	44 770
Certificated	12 470	12 470
Uncertificated	13 800	13 800

SOURCE IIEP estimate based on *Medium-term plan*, op. cit.

As detailed data are not available on the breakdown of teachers according to their position on the salary scale, estimates are worked out on the basis of average salary figures adjusted by a coefficient of 1.25 to take into consideration their increase in real terms. The hypotheses on average salaries are given in table 77.

TABLE 77. Average salaries (non-adjusted, in rupees)

Category of staff	Average salary	Category of staff	Average salary
Principals (second level)	7 660	Non-specialist trained and first-level principals	3 650
Graduates	6 500	Certificated	3 155
Specialists	4 000	Uncertificated	2 500

SOURCE Ministry of Education.

With regard to 'other current costs' very little information is available, and it would be a definite error to forecast these costs for 1980 on the basis of their level before the reform. In actual fact, if we expect to see the new plan implemented quantitatively (in terms of enrolment ratios) and qualitatively (in terms of restructuring of the schools. reforming the curriculum and introducing new subject areas) adequate budgetary provision should be made, leaving aside for

the moment how these increases will be financed. In the case of grade 1 to 5 enrolment an arbitrary amount of 50 rupees a year should be envisaged for each pupil to cover the cost incurred in terms of maintenance of the school, recreational activities, initiation to local conditions of life, running and maintenance of school gardens, etc. In the case of grade 6 to 9 enrolment there are two categories of 'other current costs'; one is to cover an evening-up of charges throughout the island; the second, more strictly related to the introduction of 'pre-vocational' subject areas, will depend chiefly upon the conditions prevailing in each region of the country. For example, if the children's training is about fisheries, one needs to take in charge (at least on a part-time basis), a boat; if children are to be trained on coconut plantations, one needs to finance the use of the required plot of coconut plantation; etc. How under these circumstances is it possible to estimate 'other current costs' on the basis of a national average per-pupil cost? In spite of this difficulty, an assumption is made that on average each child would require a ½ rupee per day (for 200 days a year). The same figure has been adopted for enrolment in grades 10 and 11.

With regard to capital costs, in the absence of any detailed analysis on the programme of school construction envisaged by the government in the light of the need to revise the school network to make it fit in better with the new structure of the educational system, we have adopted — as they stand — the estimates of the Ministry of Education (see the *Medium-term plan*, op. cit.).

TEACHER TRAINING

In the case of teacher training, the cost estimates do not include the cost of training teachers through the university (i.e., graduates). The financial requirements are estimated separately for specialist teacher-training colleges and for non-specialist institutions. Provisions are also made for stipends of trainees, whose rates have been adjusted as for all salary costs. For other current expenditures, we have adopted the estimates of the medium-term plan.

TECHNICAL EDUCATION

A distinction is made between institutions within the Ministry of Education and those outside it. Separate forecasts are provided for cost of training in agriculture, in commerce and in industries and services, and at the ' craft ' or 'art' or 'technician' levels. All figures are estimated on the basis of unit current expenditures per full-time student equivalent. Adequate adjustments are made to express the cost in real terms.

UNIVERSITY AND COLLEGES OF TECHNOLOGY

Separate cost estimates are made for each department. These are based upon average expenditures per student expressed in real terms in 1980. They are shown in Table 78.

TABLE 78. Average expenditure per student in 1980

	Rupees		Rupees
Arts and law	2 510	Agriculture	7 650
Medicine and dentistry	5 380	Veterinary sciences	10 000
Sciences	3 970	Architecture	5 220
Engineering	5 220	College of technology	7 240

SOURCE IIEP estimate.

OUT-OF-SCHOOL EDUCATION

Following the plan, no major programme is to be expected in this field in the immediate future. However, to take into consideration the inevitable requirements, especially by 1930, we have estimated arbitrarily that a global allocation of 10 to 20 million rupees would be devoted to out-of-school activities (including adult education) by then.

The results

On the whole, the financial requirement in 1980 appears to be as given in Table 79.

Total current expenditures for education would reach between 874 million rupees and 971 million rupees in 1980, depending upon the hypothesis in terms of staffing conditions and enrolments.

The breakdown of expenditures by level shows that by far the largest proportion of the current budget would be devoted to first- and second-level education, which altogether requires 85 per cent of the total current expenditure.

Capital allocations would remain modest on the whole in 1980. It is to be noted, however, that in the coming four to five years capital investment in education will have to average significantly higher than it will in 1980, in order to help in the implementation of the reform.

2. The financing of the educational expenditures

How would the educational expenditures be financed? Table 80 gives some indications in this regard.

In the case of first-level education, all expenditures would be financed by the Ministry of Education budget except in the case of estate schools, private fee-levying schools and non-fee-levying schools, where the mechanisms of financing in practice today will remain in 1980.

Grades 6 to 9 education would, in principle, be financed as at present, with one exception. The additional costs implied by the introduction of the 'pre-

TABLE 79. Financial requirements, 1980 (millions of rupees)

	Low assump.	High assump.		Low assump.	High assump.
First level			*Third Level*		
Salary cost	265	300	Arts and law	20	20
Other current	90	90	College of technology	5	6
Total current	355	390	Medicine and dentistry	9	10
			Sciences	12	14
Second level			Engineering	5	6
Salary cost	280	325	Agriculture	3	4
Other current	105	105	Total current	56	63
Total current	385	430			
First and second level			*Out-of-school*		
Total current	740	820	Total current	10	20
Teacher-training colleges			*All levels*		
Total current	39	39	Total current	874	971
			Total capital [1]	61	61
Technical and vocational					
J.T.I. and S.T.I.	14	14			
Agriculture	3	3			
Commerce	4	4			
Industries and services	8	8			
Total current	29	29			
GRAND TOTAL				956	1 038

1. Estimates of the *Medium-term plan*, op. cit.
SOURCE IIEP estimate.

vocational subject areas' studies will be partly supported by the parents and local authorities. This support can be either 'in kind' or by way of fees. On average the contribution per pupil enrolled should be in the order of 25 rupees.

No substantial change will be introduced in the financing of other levels and types of education. Out-of-school training will be almost entirely supported by fees.

Capital expenditures would be financed by the Ministry of Education budget, with the help of foreign assistance for some capital projects.

Thus, on the whole, about 7 per cent of total current expenditures on education will be financed by non-public sources. The total requirements from the government's current budget would vary from 816 million rupees in the low hypothesis to 896 million rupees in the high assumption, all estimates being made in constant 1972 rupees.

To what extent these requirements can be financed by the national budget can be assessed by comparing likely availability of resources for government social service activities (including education) in 1980. Using the estimates of the

Ministry of Planning and Employment, the current resources devoted to education would be between 600 and 700 million rupees out of a total of 1,050-1,100 million rupees allocated for expenditures on social services. Thus the likely deficit in the public education budget would be about 200 million rupees (see Table 81).

How can this deficit be overcome?

TABLE 80. Financing of education, 1980 (millions of rupees)

	Low assumption		High assumption	
	Amount	Total	Amount	Total
First level				
Public	348		382	
Other	7		8	
Total		355		390
Second level				
Public	360		400	
Other	25		30	
Total		385		430
Technical and vocational				
Public	19		19	
Other	10		10	
Total		29		29
Teacher training				
Public		39		39
Third level				
Public	50		56	
Other	6		7	
Total		56		63
Out-of-school				
Other		10		20
Total current				
Public	816 (93.4 %)		896 (92.2 %)	
Other	58 (6.6 %)		75 (7.8 %)	
TOTAL	874 (100.0 %)		971 (100.0 %)	

SOURCE IIEP estimate.

TABLE 81. Deficit on education in 1980

	Educational budget	
	600 million rs.	700 million rs.
Current expenditures on education		
816 million rupees	216	116
896 million rupees	296	196

3. The alternatives for eliminating the deficit

There are numerous possibilities for eliminating the deficit. The most interesting ones are the following: higher economic growth; change in the pattern of financing; lower increase in enrolment; incomplete implementation of the new educational reform; change in the unit cost.

We will examine the gross marginal effect of each of these alternatives.

Higher economic growth

If we assume that the annual rate of economic growth averages 6 per cent, following the hypothesis adopted by the government in the Five-year Plan (instead of the 4.5 per cent assumed in this report), then the total resources available for the current educational budget would be of the order of 700 to 825 million rupees in 1980.

However, the financial requirement for current expenditures will have to be adjusted, particularly to take into account the higher increase in the standard of living. More specifically, the total current public expenditures would be of the order of 880 million rupees to 980 million rupees according to the assumptions made.

The deficit, none the less, would be partly eliminated and reduced to 65 million rupees, i.e., 880—825, in the best alternative, remaining as high as 280 million rupees (i.e. 980—700) in the unfavourable one.

Referring back to the discussion on the likely economic growth prospects for the country, it is quite unlikely that a 6 per cent growth rate could be achieved during the 1970s, and it is necessary therefore to investigate other possibilities for reducing the educational budget deficit.

Change in the pattern of financing

Several possibilities can be envisaged, though all would require some significant adjustment in the current practices of financing.

For example, if the total cost of introducing pre-vocational subjects were supported by families and local authorities, about 50 million rupees would be secured from non-public sources, which would diminish the deficit by the same amount. The only problem is that there is not much reason to believe that it is realistic to assume the implementation of the reform introducing pre-vocational studies in grades 6 to 9 with a contribution of some 75 rupees per pupil enrolled every year. What would be more likely to happen is the non-implementation of the reform as it has been designed, since parents would limit their contribution to a minimum. This might result in a lack of adequate equipment and materials for providing the courses with practical subjects.

Other examples of altering the pattern of financing are:

(a) increasing the contribution of industries and public corporations in financing technical and vocational education (a possible cost saving for the government budget of 10 million rupees);

(b) introducing a system of student loans and increasing the rate of fees in university education, with appropriate grants for students from low-income families (a possible cost saving for the government budget of 5 to 10 million rupees).

On the whole, it would be possible (though dubious on social and even economic grounds), to diminish the budget deficit by some 70 million rupees by increasing the share of the non-public resources for financing education (almost doubling the present share).

Lower increase in enrolment

Data on manpower requirements by qualification are not available. However, it is quite likely that if enrolment in post-junior second level were to be limited to manpower needs, the forecast would have to be decreased by some 20 per cent in senior second level and in the university—a possible cost saving of about 17 to 20 million rupees.

If enrolment at the junior second level covered a smaller proportion of the age-group, it would also produce a financial saving. For example, 5 per cent less enrolment in grades 6 to 9 would diminish the financial requirements by about 14 to 20 million rupees.

Incomplete implementation of the educational reform

This might take the form of either the end of the 'open access' span at grade 8 (which would lead to diminishing the financial requirements by some 40 million rupees) or inadequate provision of facilities and premises for pre-vocational subjects.

Change in the unit costs

Several policies can be envisaged:

(a) An absolute stabilization of the salaries of teachers to their 1972 levels; the saving can be as high as 150 million rupees. This alone would eliminate the deficit on the current budget. Obviously, however, such a policy might be difficult to implement unless a general programme of wages and income distribution policy is adopted by the government, the salaries of teachers being part of that programme.

(b) A rise in the staffing ratio hypotheses, or maintaining the staffing ratios at their present level. The order of magnitude of the cost saving would be around 10 per cent.

(c) A rationalisation of school location and mapping, with a view to more intensive utilization of staff and premises. In the absence of any adequate data on the allocation of staff and equipment it is difficult to estimate with any accuracy the amount of potential cost saving available. In the case of higher education, the unit expenditure per student is particularly high in some

departments — agriculture, veterinary sciences, colleges of technology, etc. Some possibilities of cost saving can be investigated.

(d) an intensive use of new media in education. Two questions might be raised however in this respect: (i) Is this a realistic hypothesis? (ii) Is it really a means of saving costs?

(i) In the first instance, it does not seem realistic to assume that the Sri Lanka authorities, while facing a very complex problem of foreign exchange, would introduce a change in their school system which would lead to an increase in imports of either manufactured or semi-manufactured goods, which is likely to happen if the use of new media is introduced in schools. Secondly, it does not appear to be appropriate to try saving on labour in a country facing a severe unemployment problem.

(ii) Studies have shown that, due to economies of scale, new media used beyond a critical mass can produce unit cost saving. But, to work effectively, new media require some conditions to be fulfilled in terms of organization, qualification of staff, support, etc. And, while unit cost can decline after the use of new media has reached a certain threshold, the initial investment is likely to be very heavy in terms of capital and human resources. It is not certain that from the authorities' point of view, this can be envisaged in the present circumstances.

In Table 82 we have made an attempt to compare four 'package deal decisions' in relation to their financial implications, to their economic likelihood, to the resistance they are likely to create among some social groups, and to their influence on the achievement of the reform.

Of the four, the last one seems to be the most attractive. This does not necessarily mean that it is the easiest to implement. In actual fact, it requires a strictly balanced educational policy, both in terms of admission to schools, salary increase for teachers and other personnel, and more intensive use of educational resources. In this respect, in our view, one of the main pre-requisites for implementing the reform without losing the spirit in which it has been designed is to make adequate financial provisions from the government to cover the cost of pre-vocational studies and eventually save on teacher salaries, rather than to rely on families and local authorities to support the cost incurred by the reform.

4. Concluding remarks

As has been indicated earlier, the estimates given in this study relate only to the current and capital costs in 1980, provided the new educational system is to be implemented during the coming years. They do not include in any way the financial capital and current requirements to introduce the reform and implement the medium-term plan over the period 1972-76. In particular, no estimates are given for training and retraining the teachers, revising the curriculum, building an adequate school network, etc. And there are several reasons to believe

TABLE 82. Cost/performance analysis of four alternative strategies for eliminating the deficit

	Financial implications	Performance: Economic likelihood	Social resistance	Implementation of the reform
1. 6 per cent economic growth plus doubling the nongovernment contributions	deficit reduced to about 100 million rupees	poor	fair	good
2. 5 per cent enrolment in grades 6-9 + enrolment at post-junior second level limited to manpower need + doubling non-government contributions + teacher salaries strictly constant	deficit eliminated	fair	strong	fair
3. End open access at grade 8 + inadequate provision of facilities for pre-vocational studies + maintaining staffing ratios at present level	deficit reduced to about 50 million rupees	good	fair	poor
4. Increasing contribution of industries + lower enrolment at junior second level (−10%) + lower increase in staff salaries (+30%) + cost saving by rationalization of use of staff and equipment	deficit eliminated	good	fair	fair

SOURCE IIEP.

that the country will be less able to support the cost of the reform in, say, 1975 than in 1980, as the size of enrolment and consequently the cost of education would not be much lower in 1975 while the public income (and the likely educational share of it) will be significantly low in the mid 1970s.

Perhaps it would be useful to assess the financing effect of the reform by comparing the percentages of the public budget and GNP required for education in 1970 and in 1980. Table 83 shows that current public expenditure on education will have to increase from a level of 29.2 per cent of the public budget in 1970 up to about 36 per cent in 1980, while total expenditure on education, which represents 4.1 per cent of GNP in 1970, would reach some 5 per cent by the end of the decade. This means that in spite of the reasonable growth of enrolment and the wise policy regarding the quantitative and qualitative expansion of the school system adopted by the government, the share of education in the national resources will have to increase in the coming years.

In this respect, the educational planners in Colombo are quite aware of this financial pressure and have deliberately decided to limit or postpone some measures and urgent educational policy decisions in the country, considering them of low priority. This is the case for the social sector of out-of-school education, and more

TABLE 83. Percentages of GNP and current budget spent on education

	1970	1980
Total expenditures on education as percentage of GNP	4.1	4.3-5.3
Current public expenditures as percentage of current public payments (exclusive of food subsidies)	29.2	35.8-36.6

specifically for adult and continuing education. It is interesting to note that several other countries have taken some far-reaching decisions with regard to the development of out-of-school education activities. We do not mean that no specific programmes are envisaged for youths and adults in Sri Lanka (e.g., apprenticeship training schemes) but it is not planned to be a major priority programme area.

Another sector which does not seem to take a significant share of the investments in education is pre-school activities. Here again, educational planners in Sri Lanka had to make some priority decisions and apparently postpone any major programme in the immediate future.

It had been felt that these two examples illustrate, if necessary, the very stringent conditions and constraints within which the reform was constructed. They should not therefore be ignored in assessing the financial dimensions of the reform.

Finally, there is a very serious limitation to the financial estimates given in this study which should be emphasized. They can give the illusion that if adequate resources are provided for the educational budget, a successful implementation of the reform can be expected and the unemployment problem solved. In reality, no estimates are given in this study of the financial requirements for opening sufficient employment opportunities to absorb the continuous output of the school system over the coming ten years. Admittedly, the strategy of growth adopted by the government gives a major priority to solving the employment problem, particularly by creating and encouraging self-employment. But any programme of creation of self-employment requires an adequate system of credit and a minimum financial provision for those who would seek to become 'self-employed'.

In actual fact, every year about 150 to 200 thousand people will be achieving grade 9 and leaving school. Assuming that the reform is successfully introduced in the schools and that these school leavers have acquired the practical knowledge, say in 'pre-vocational subject areas', it is easy to foresee what will happen to them if no adequate financial provision is made to generate sufficient employment opportunities. Frustration and lack of confidence in the school system would reach such a level that one might prefer the *status quo ante* to a 'successful' educational reform leading to an exaggeration of the employment difficulties.

In the end, reforming the school system and producing the 'right educational output' is only one part of any socio-economic development policy. Only if the economy of the country can absorb the educational 'output' does a development strategy reach its ultimate targets.

Appendix I

TABLE 1. National product and expenditure: gross national product at current factor cost prices (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Agriculture, forestry, hunting and fishing	2 389.7	2 456.1	2 392.3	2 600.2	2 663.5	2 522.5	2 613.6	2 939.9	3 655.9	3 731.8	3 948.7
Mining and quarrying	32.2	31.7	33.4	30.0	33.1	35.1	38.4	39.9	46.8	69.0	84.1
Manufacturing	711.7	709.5	748.9	783.6	819.4	918.5	866.2	883.6	1 160.3	1 311.5	1 434.2
Construction	283.1	279.1	297.0	285.4	306.3	286.9	317.2	380.2	508.9	645.7	771.1
Electricity, gas, water and sanitary services	9.8	10.4	11.1	11.4	12.9	13.5	14.3	15.1	16.4	18.4	26.3
Transport, storage and communications	587.3	578.9	633.6	636.6	706.3	775.6	829.2	831.0	910.7	1 058.4	1 175.9
Wholesale and retail trade	936.5	872.8	954.4	971.2	1 146.6	1 191.2	1 237.8	1 293.7	1 363.6	1 698.8	1 793.5
Banking, insurance and real estate	51.5	58.4	64.5	68.5	75.9	93.2	85.8	107.4	138.6	142.7	152.2
Ownership of dwellings	213.5	233.1	248.6	260.3	275.3	294.0	314.0	332.5	366.3	388.6	398.9
Public administration and defence	314.4	323.5	343.7	365.1	363.3	371.9	396.5	402.9	474.3	469.2	516.5
Services	801.3	799.7	821.5	836.9	923.6	996.5	1 028.3	1 091.8	1 227.4	1 322.6	1 458.5
Gross domestic product	6 331.0	6 353.2	6 549.0	6 849.2	7 326.2	7 498.9	7 741.3	8 318.0	9 869.2	10 856.7	11 759.9
Net factor income from abroad	−44.2	−39.9	−46.5	−52.5	−35.7	−15.4	−36.8	−53.5	−60.5	−109.0	−153.6
Gross national product	6 286.8	6 313.3	6 502.5	6 796.7	7 290.5	7 483.5	7 704.5	8 264.5	9 808.7	10 747.7	11 606.3

SOURCE Central Bank of Ceylon.

TABLE 2. National product and expenditure: gross national product at constant (1959) factor cost prices (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Agriculture, forestry, hunting and fishing	2 435.5	2 613.5	2 694.5	2 846.0	2 694.5	2 772.8	2 821.3	3 060.6	3 248.4	3 276.4	3 395.2
Mining and quarrying	32.4	31.8	33.2	29.5	32.1	34.0	37.1	37.0	37.3	55.0	65.2
Manufacturing	728.0	745.9	797.6	853.0	901.3	936.9	1 008.1	1 052.1	1 154.0	1 260.5	1 334.9
Construction	280.9	268.6	281.5	271.8	283.3	266.2	293.2	350.8	446.0	519.5	598.2
Electricity, gas, water and sanitary services	9.8	10.4	11.1	11.4	12.9	13.5	14.3	14.7	15.0	17.6	21.3
Transport, storage and communications	584.8	565.7	608.1	591.8	640.7	740.3	791.8	772.9	823.9	899.1	912.5
Wholesale and retail trade	828.8	839.4	891.9	875.1	1 003.1	1 105.2	1 144.1	1 193.8	1 253.3	1 366.7	1 391.4
Banking, insurance and real estate	51.8	58.5	64.2	67.4	73.6	90.4	83.0	99.6	110.4	113.7	118.0
Ownership of dwellings	211.8	224.2	235.8	227.2	254.8	272.8	272.8	263.1	274.7	290.9	301.5
Public administration and defence	314.4	323.5	343.7	365.1	363.3	371.9	396.5	388.9	432.4	445.4	458.8
Services	754.2	783.3	798.1	812.3	886.0	960.9	992.3	1 021.4	1 104.8	1 138.9	1 183.7
Gross domestic product	6 232.4	6 464.8	6 759.7	6 950.6	7 145.6	7 564.9	7 854.5	8 254.9	8 900.2	9 383.7	9 780.7
Net factor income from abroad	−43.9	−40.1	−49.8	−50.9	−33.7	−14.3	−36.1	−44.5	−38.7	−67.5	−85.4
Gross national product	6 188.5	6 424.7	6 709.9	6 899.7	7 111.9	7 550.6	7 818.4	8 210.4	8 861.5	9 316.2	9 695.3

SOURCE Central Bank of Ceylon.

TABLE 3. GDP at current factor cost prices (percentages)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1. Agriculture, forestry, hunting and fishing	37.7	38.7	36.5	38.0	36.4	33.6	33.8	35.3	37.0	34.4	33.6
2. Mining and quarrying	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.7
3. Manufacturing	11.2	11.2	11.4	11.4	11.2	12.2	11.2	10.7	11.8	12.1	12.2
4. Construction	4.5	4.4	4.5	4.2	4.2	3.8	4.1	4.6	5.2	5.9	6.6
5. Electricity, gas, water and sanitary services	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6. Transport, storage and communications	9.3	9.1	9.7	9.3	9.6	10.3	10.7	10.0	9.2	9.7	10.0
7. Wholesale and retail trade	14.8	13.7	14.6	14.2	15.7	15.9	16.0	15.6	13.8	15.6	15.3
8. Banking, insurance and real estate	0.8	0.9	1.0	1.0	1.0	1.2	1.1	1.3	1.4	1.3	1.3
9. Ownership of dwellings	3.4	3.7	3.8	3.8	3.8	3.9	4.1	4.0	3.7	3.6	3.4
10. Public administration and defence	5.0	5.1	5.2	5.3	5.0	5.0	5.1	4.8	4.8	4.3	4.4
11. Services	12.7	12.6	12.5	12.2	12.6	13.3	13.3	13.1	12.4	12.2	12.4
Gross domestic product at factor cost [1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. Totals differ due to rounding.

SOURCE Central Bank of Ceylon.

TABLE 4. Indexes of price trends, 1960-70

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
GDP price index	100.0	98.0	94.5	98.0	99.0	99.0	98.5	100.5	110.5	116.0	120.0
Cost-of-living index (Colombo town)	100.0	101.0	103.0	105.0	108.5	109.0	108.5	111.0	117.5	126.0	133.5
FOB prices (exports in rupees):											
Tea	100.0	98.0	95.0	93.5	94.0	92.0	87.0	83.0	94.0	89.5	91.0
Rubber	100.0	81.0	80.0	76.0	71.0	71.0	70.0	60.0	63.0	85.0	77.0
Dessicated coconut	100.0	76.0	88.0	95.0	91.5	122.0	103.5	102.0	183.0	133.0	157.0

TABLE 5. Use of GDP (results of the last ten years at current prices), 1960-70 (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Private consumption	5 019.9	4 911.7	5 009.6	5 339.1	5 754.8	5 880.9	6 273.7	6 677.0	7 550.4	8 412.4	8 945.5
Public consumption	911.0	926.2	979.4	1 010.6	1 090.1	1 156.7	1 158.3	1 240.2	1 407.8	1 471.1	1 648.7
Gross fixed capital formation	1 022.1	1 037.4	1 100.8	1 095.3	1 119.6	1 043.0	1 187.2	1 366.3	1 567.7	2 115.8	2 344.6
Changes in stocks	−44.4	64.1	−20.4	65.0	−6.5	−29.8	7.9	10.7	100.1	−22.5	137.9
Exports	1 915.0	1 907.2	1 971.0	1 902.6	1 937.1	2 094.5	1 864.9	1 848.7	2 165.3	2 151.5	2 237.4
Imports	2 157.0	1 972.0	2 070.3	2 030.9	2 101.9	2 060.9	2 154.7	2 105.6	2 473.6	2 878.8	2 548.7
Expenditures on GDP	6 666.6	6 874.6	6 970.0	7 381.7	7 793.2	8 084.4	8 337.3	9 037.3	10 317.7	11 409.4	12 775.1

SOURCE Central Bank of Ceylon.

TABLE 6. Payments by government of Sri Lanka (millions of rupees)

Payments	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70 (provisional)	1970-71 (original estimate)
Current payments	1 693.7	1 726.9	1 817.9	1 895.8	1 996.8	2 096.7	2 392.4	2 612.3	2 849.8[1]	3 009.3[1]
Purchase of goods and services	994.2	1 005.3	1 040.8	1 097.5	1 129.0	1 184.5	1 329.7	1 411.2	1 527.8	1 597.2
Administration	256.3	247.7	251.3	263.2	279.3	291.3	331.9	343.2	410.4	429.6
(a) Civil administration	185.1	187.6	191.0	202.2	214.3	224.6	255.5	260.5	318.4	332.6
(b) Defence	71.2	60.1	60.3	61.0	65.0	66.7	76.4	82.7	92.0	97.0
Social services	431.1	449.8	467.6	490.6	499.0	528.6	596.8	642.9	732.9	752.1
(a) Education	271.0	291.0	305.7	323.5	324.5	338.1	377.1	410.6	472.4	484.6
(b) Health	141.5	143.6	144.3	148.5	156.4	168.4	196.1	210.0	235.7	240.1
(c) Housing	1.1	1.1	1.2	1.2	1.3	1.4	1.6	1.5	1.9	2.3
(d) Special welfare services	11.0	9.9	10.5	11.1	11.1	11.9	12.8	12.9	14.2	15.3
(e) Community services	6.5	4.2	5.9	6.3	5.7	8.8	9.2	7.9	8.7	9.8
Economic services	86.2	88.6	94.9	104.5	98.6	104.2	109.0	120.1	130.3	161.0
(a) Agriculture and irrig.	42.8	43.5	44.3	53.9	46.4	51.3	51.8	57.0	66.5	78.4
(b) Fisheries	2.1	2.5	3.1	2.1	1.5	1.7	1.9	1.9	2.3	5.6
(c) Manuf. and mining	11.1	12.0	11.3	11.7	11.7	14.3	13.7	17.7	18.1	24.7
(d) Trade	13.7	14.8	16.1	15.6	16.3	16.3	17.5	17.0	19.2	20.6
(e) Communication	16.5	15.8	20.1	21.2	22.7	20.6	24.1	26.5	24.2	31.7
Gross payments of trading enterprises	217.5	215.9	223.6	235.7	248.6	256.7	288.1	301.0	249.9	250.0
Intra-governmental payments	3.1	3.3	3.4	3.5	3.5	3.7	3.9	4.0	4.3	4.5
Transfer payments	699.5	721.6	777.1	798.3	867.8	912.2	1 062.7	1 201.1	1 281.9	1 372.6
To private current accounts	648.5	667.4	716.3	743.3	806.5	800.0	975.7	1 076.5	1 146.9	1 220.4
(a) Subsidies	431.2	427.7	445.7	461.8	505.2	487.3	610.3	668.8	647.6	665.6
of which: Food subsidy	(420.7)	(416.6)	(431.3)	(446.6)	(487.4)	(465.5)	(578.7)	(620.4)	(599.1)	(614 4)
(b) Interest on public debt	83.?	98.2	113.7	105.9	123.2	143.5	166.5	206.2	253.3	309.0
(c) Pensions	95.3	102.2	114.7	126.9	125.1	128.7	154.9	161.1	182.9	186.5
(d) Households	38.8	39.3	42.2	48.7	53.0	40.5	44.0	40.4	63.1	59 3
Other transfers	51.0	54.2	60.8	55.0	61.3	112.2	87.0	124.6	135.0	152.2
(a) Domestic	48.9	52.2	58.3	53.4	59.4	107.8	84.1	120.9	127.7	147.3
(i) To local authorities	38.0	39.6	41.4	40.4	44.3	44.3	52.5	61.9	58.9	60.8

(ii) To public corpns.	1.2	1.0	5.3	—	2.5	1.0	6.6	12.4	12.4	23.9
(iii) To other institutions	9.7	11.6	11.6	13.0	12.6	62.5	25.0	46.6	56.4	62.6
(b) Abroad	2.1	2.0	2.5	1.6	1.9	4.4	2.9	3.7	7.3	4.9
Capital payments	553.9	463.1	474.7	535.4	589.7	695.4	789.2	909.8	883.1	1 194.5
Acquisition, construction and maintenance of real assets	335.8	346.7	322.2	345.8	365.3	420.0	493.9	526.2	518.0	784.5
Civil administration	6.1	6.0	6.9	7.0	7.7	11.9	13.1	16.7	19.4	18.8
Social services	85.2	77.1	80.6	73.0	58.7	79.6	93.8	112.9	120.6	202.6
(a) Education	27.5	25.5	36.2	31.0	22.0	26.5	33.1	31.6	40.1	68.2
(b) Health	20.1	16.1	16.1	18.3	16.6	20.9	24.5	37.5	38.0	47.3
(c) Housing	32.4	29.5	22.8	18.8	14.2	26.0	30.6	35.8	34.1	50.0
(d) Special welfare services	3.3	2.7	3.1	3.3	2.9	2.1	2.3	2.7	2.6	3.0
(e) Community services	1.9	3.3	2.4	2.5	3.0	4.1	3.3	5.3	5.8	34.1
Economic services	244.5	263.6	234.7	264.9	298.9	328.5	387.0	396.6	387.0	548.8
(a) Agriculture and irrig.	80.6	79.4	73.8	79.3	95.6	110.7	140.0	168.1	172.8	250.8
(b) Fisheries	1.4	3.4	0.7	1.3	3.7	0.1	0.1	0.1	1.0	18.3
(c) Manuf. and mining	5.7	4.5	7.1	9.9	10.5	7.9	24.2	5.0	8.8	16.6
(d) Trade	7.3	3.4	2.9	3.0	2.8	1.9	3.4	13.9	7.0	34.2
(e) Communication	106.8	129.4	109.7	121.8	136.7	161.0	154.9	170.0	185.1	228.9
(f) Power	42.7	43.5	40.5	49.6	49.6	46.9	64.4	39.5	3.3	—
Capital transfers	130.8	109.9	123.6	162.7	189.3	240.3	267.9	332.4	319.5	357.7
Domestic	130.7	109.8	123.4	162.7	189.3	240.2	267.8	332.3	319.4	357.6
(a) To local authorities	7.7	7.9	8.1	7.7	11.3	13.1	13.0	14.0	15.5	15.5
(b) To public corporations	105.9	84.8	104.1	147.1	151.5	198.9	210.1	285.6	282.8	317.0
(c) To other	17.1	17.1	11.2	7.9	26.5	28.2	44.7	32.7	21.1	25.1
Abroad	0.1	0.1	0.2	—	—	0.1	0.1	0.1	0.1	0.1
Aquisition of financial assets	87.3	6.5	28.9	26.9	35.1	35.1	27.4	51.2	45.6	52.3
Net payment on account of operations financed through advance accounts	20.8	−4.9	12.4	0.5	22.7	32.5	−29.2	51.3	194.6	1.9
TOTAL PAYMENTS	2 268.4	2 184.8	2 305.0	2 431.8	2 609.0	2 824.6	3 152.6	3 573.3	3 927.9	4 205.7

1. Including certain FEEC expenditure not otherwise allocable.
SOURCE Central Bank of Ceylon.

TABLE 7. Receipts of the government of Sri Lanka (millions of rupees)

Receipts	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70 (provisional)	1970-71 (original estimate)
Current receipts	1 776.0	1 755.9	1 808.7	1 968.0	2 011.1	2 179.7	2 404.1	2 747.2	2 937.3	2 968.0
Charges and sales	43.2	46.1	60.2	45.0	70.7	65.5	53.2	53.1	54.4	70.1
Income from property	8.3	7.6	6.3	6.2	6.8	7.7	7.4	7.7	17.7	9.8
Net surplus of financial enterprises	1.5	—	2.1	2.2	1.8	1.8	2.2	2.2	3.5	3.5
Depreciation of fixed assets of trading enterprises	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Interest and dividends received	10.3	7.3	9.5	17.6	11.4	13.9	21.2	18.8	41.5	63.8
From local government	—	—	—	—	—	—	—	—	—	—
From corporations and public companies	7.4	4.4	6.4	14.4	8.3	10.0	15.0	11.5	31.4	57.3
Within central government	1.9	2.0	1.8	2.0	1.8	2.6	4.5	5.4	7.9	4.6
From other sectors	0.9	0.9	1.3	1.2	1.3	1.3	1.7	1.9	2.1	2.0
Social security contributions	13.4	14.0	14.8	12.5	12.8	15.3	16.0	16.4	16.8	18.3
Taxes from personal income Taxes on corporate income	285.3	281.0	288.8	295.9	277.6	312.3	317.6	343.9	441.1	425.0
Other transfers from income account of households	4.2	4.5	7.2	10.5	15.2	19.1	21.2	26.7	21.4	23.9
Taxes on production & expenditure	1 170.9	1 149.4	1 145.3	1 302.0	1 309.0	1 430.1	1 624.0	1 900.3	2 048.9	2 042.1

General sales and turnover taxes	9.5	12.2	27.1	46.2	40.9	72.2	79.2	111.0	247.4	293.8
Selective sales taxes	143.6	153.0	167.0	185.4	172.7	199.2	238.7	278.3	275.8	300.8
Import duties	465.0	397.8	481.6	435.9	476.9	544.3	514.0	460.2	306.5	288.0
Receipts from sale of FEECs	—	—	—	—	—	—	77.0	285.2	446.0	457.0
Export duties	223.2	218.9	217.3	251.7	220.6	182.7	264.5	300.3	327.2	331.8
Taxes on foreign exchange	—	—	3.7	5.0	0.1	—	—	—	—	—
Licence taxes	52.9	52.2	61.0	86.9	53.2	41.9	37.8	41.4	40.3	44.7
Property transfer taxes	13.1	14.0	14.4	15.4	16.6	19.5	20.4	22.0	22.2	20.7
Surplus of government monopolies	72.0	98.0	88.0	90.0	118.0	106.8	110.0	110.3	124.4	150.0
Receipts from food sales	191.6	203.3	85.2	185.5	210.0	263.6	282.4	291.6	259.1	155.3
Transfers from local government for current expenditure	—	—	—	—	—	0.4	0.6	0.9	1.6	3.9
Current transfers from abroad	...	0.5	...	1.8	0.3	0.1	1.6	0.1	0.2	—
Reimbursements from public corporations	4.3	3.3	4.0	3.7	4.1	3.4	3.9	5.5	6.8	5.0
Gross receipts from trading enterprises	234.6	242.2	270.5	270.6	301.4	310.1	335.2	371.6	283.6	302.7
Port, harbour, wharf warehouse & other dues	28.0	25.5	29.7	29.1	33.8	33.8	36.3	41.0	44.4	52.0
Postal and telecommunication services	47.3	47.4	50.4	49.6	54.8	56.9	64.0	69.5	72.9	93.4
Broadcasting department revenue	3.9	4.7	4.4	4.0	4.1	1.0	—	—	—	—
Railway revenue	102.6	107.2	117.0	114.7	117.3	120.3	124.6	131.0	139.9	134.8
Department of Government Electrical Undertakings	48.6	54.9	59.1	69.7	83.9	93.2	105.9	115.0	1.8	3.2
Others	4.1	2.5	10.0	3.5	7.5	4.9	4.4	15.1	24.5	19.3

continued overleaf

TABLE 7, continued

Receipts	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70 (provisional)	1970-71 (original estimate)
Capital receipts	492.4	428.9	496.3	463.8	597.9	644.9	748.5	826.1	990.6	993.7
Sales of existing capital goods	0.2	...	...	0.1	...	0.2	...	...	...	...
Transfers from capital account of domestic sectors	32.2	31.8	23.8	27.5	23.4	22.5	23.2	28.7	29.2	31.3
Death duties	8.8	8.3	8.4	7.1	10.6	8.8	9.0	14.3	12.0	15.0
Other capital taxes	23.4	23.5	15.4	20.4	12.8	13.7	14.2	14.4	17.2	16.3
Other	—	—	—	—	—	...	...	—	—	—
Capital transfers from abroad (grants)	18.1	31.1	31.9	24.1	41.5	19.3	29.0	19.5	56.5	n.a.
Repayments of direct loans and advances	3.8	5.4	10.8	5.8	8.5	15.4	9.6	9.8	25.5	30.9
Local government	0.3	0.3	0.3	0.2	0.1	0.1	...	...	—	—
Corporations	0.4	—	5.1	1.0	0.9	8.7	—	—	15.1	24.5
Other	3.1	5.1	5.4	4.6	7.5	6.6	9.6	9.8	10.4	6.4
Direct borrowing	478.3	360.2	384.4	386.8	606.9	609.9	722.8	656.9	905.0	931.5
Central Bank	162.1	156.2	142.5	−39.5	179.7	125.7	302.1	114.9	376.4	97.1
Commercial banks	64.5	21.9	−27.3	57.2	−17.4	−74.4	1.4	−46.8	77.1	
Private non-bank	112.4	155.0	207.6	243.2	255.9	297.0	248.3	202.5	266.0	343.5
Non-market borrowing	104.5	−33.8	−1.9	50.3	112.2	72.3	9.8	52.2	21.8	—
Abroad	34.8	60.9	63.5	75.6	76.5	189.3	161.2	334.1	163.7	490.9
Decline in cash balances and foreign aid counterpart funds	−40.2	0.4	45.4	19.5	−82.4	−22.4	−36.1	111.2	−25.6	—
TOTAL RECEIPTS	2 268.4	2 184.8	2 305.0	2 431.8	2 609.0	2 824.6	3 152.6	3 572.3	3 927.9	3 961.7

SOURCE Central Bank of Ceylon.

TABLE 8. Gross fixed capital formation at current market prices by type of investment, 1960-70 (millions of rupees)

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
Private sector and public corporations	675.0	706.9	677.0	771.6	777.2	609.7	841.8	931.2	1 136.9	1 747.9	1 706.7
Gross domestic fixed capital formation	705.0	696.3	737.2	711.3	779.0	663.3	798.4	924.3	1 101.3	1 711.7	1 78[illegible].4
Planting, replanting & land development	63.2	63.2	64.0	69.5	87.2	69.1	73.1	78.5	79.4	94.7	1[illegible].3.6
Building & certain other construction	396.1	377.8	405.0	362.2	409.1	387.8	428.9	519.6	701.7	813.0	968.2
Plant & machinery	74.8	112.5	114.3	155.7	174.5	112.1	137.4	154.1	165.4	379.7	322.0
Transport equipment	108.7	84.8	91.9	62.8	50.1	62.7	98.0	79.7	62.9	324.2	224.5
Capital goods, n.i.e.	62.2	58.0	62.0	61.1	58.1	31.6	61.0	92.4	91.9	100.1	136.1
Private sector: total	616.6	619.0	648.5	617.3	627.9	513.7	577.9	737.0	823.6	1 149.1	1 346.8
Public corporations, total	88.4	77.3	88.7	94.0	151.1	149.6	220.5	187.3	277.7	562.6	437.6
Changes in stocks	−30.0	+10.6	−60.2	+60.3	−1.8	−53.6	+43.4	+6.9	+35.6	+36.2	−77.7
Tea	−12.5	−3.1	-37.1	−16.9	−23.5	−64.1	+21.6	−24.4	−10.7	−25.6	−86.1
Rubber	−26.8	+18.6	+2.9	+20.3	−12.2	−10.7	−14.7	+10.3	−4.9	+12.9	+3.4
Coconut oil	...	...	...	..	−4.2	+10.3	+2.0	...	...	...	...
Livestock	+9.3	−4.9	+26.0	+56.9	+38.1	+10.9	−35.3	−24.2	+6.6	−16.4	...
Miscellaneous (stocks with corporations	—	—	—	—	—	—	+69.8	+45.2	+44.6	+65.3	+5.0
Government and public enterprises	302.7	394.6	403.4	388.7	335.9	403.5	353.3	445.8	530.9	505.3	785.2
Gross domestic fixed capital formation	317.1	341.1	363.6	384.0	340.6	379.7	388.8	442.0	466.4	564.0	570.2
Changes in stocks	−14.4	+53.5	+39.8	+4.7	−4.7	+23.8	−35.5	+3.8	+64.5	−58.7	+215.0
Imported rice, wheat flour and sugar	26.3	−12.1	−2.0	+0.1	−4.7	+22.0	−37.6	−6.8	+68.5	−41.6	+165.7
G.P.S. paddy	+9.7	+65.3	+45.1	+9.6			—	+10.6	−4.0	−17.1	+49.3
Arrack	+2.2	+0.3	−3.3	−5.0	...	+1.8	+2.1	—	—	n.a.	n.a.

continued overleaf

TABLE 8, continued

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
All sectors — gross domestic capital formation	977.7	1 101.5	1 080.4	1 160.3	1 113.1	1 013.2	1 195.1	1 377.0	1 667.8	2 253.2	2 491.9
Gross domestic fixed capital formation	1 022.1	1 037.4	1 100.8	1 095.3	1 119.6	1 043.0	1 187.2	1 366.3	1 567.7	2 275.7	2 354.6
Changes in stocks	−44.4	+64.1	−20.4	+65.0	−6.5	−29.8	+7.9	+10.7	+100.1	−22.5	+137.3

Estimates for 1968 to 1970 are provisional.
SOURCE Central Bank of Ceylon.

TABLE 9. Breakdown of imports by principal groups of commodities (millions of rupees)

	1966		1967		1968		1969		1970	
	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage	Value	Percentage
Food and drink	956	47.1	783	45.1	989	45.5	976	38.0	1 069	46.2
Rice	367	18.1	211	12.1	341	15.7	257	10.1	318	13.7
Flour	113	5.6	229	13.2	250	11.5	255	10.0	260	11.2
Textiles (and clothing)	119	5.9	73	4.2	77	3.5	122	4.8	124	5.3
Investment goods	361	17.8	330	19.0	383	17.6	700	27.5	546	23.6
Building materials	70	3.4	495	2.8	95	4.5	99	3.9	119	5.1
Transport equipment	116	5.7	89	5.1	80	3.7	213	8.4	126	5.4
Machinery and equipment	102	8.0	175	10.1	195	9.0	368	14.5	276	11.9

SOURCE Central Bank of Ceylon.

TABLE 10. Local government revenue (thousands of rupees)

Item	Colombo municipality	Other municipalities	Urban councils	Town councils	Total
Current revenue					
Local revenue					
Rates	24 458.6	6 635.0	4 942.8 [1]	2 364.0	38 400.4
Taxes and licence duties	2 208.4	1 706.5	1 631.4	945.1	6 491.4
Rents	1 931.9	1 723.5	1 802.0	1 099 4	6 556.8
Other	3 979.1	1 945.9	1 775.7	404.8	8 105.5
Assigned revenue	1 111.6	1 121.2	506.6	405.1	3 144.5
Subsidies from government	9 680.4	5 734.1	6 450.3	2 898.0	24 762.8
Commercial enterprises					
Electricity scheme revenue	—	10 387.0	10 928.7	5 660.9	26 976.6
Subsidies from government (electricity)	—	703.5	821.3	528.5	2 133.3
TOTAL	43 370.0	30 036.7	28 858.8	14 305.8	116 571.3
Capital receipts					
Government grants	—	—	920.1	154.6	1 074.7
Electricity scheme	—	—	184.8	—	184.8
Loans (electricity and general)	—	—	369.7	161.3	531.0
TOTAL	—	—	1 474.6	315.9	1 790.5
TOTAL REVENUE	43 370.0	30 036.7	30 333.4	14 621.7	118 361.8

SOURCE *Matching employment opportunities and expectations*, op. cit.

TABLE 11. Current and capital expenditure of local governments by purpose, 1967 (thousands of rupees)

Item	Colombo municipality	Other municipalities	Urban councils	Town councils	Total
Current expenditure					
Municipal courts	106.8	83.8	—	—	190.6
Public health	16 496.5	4 419.8	6 483.7	1 706.7	24 106.7
Thoroughfares	—	—	3 476.7	690.2	5 166.9
Water works	2 523.1	1 477.0	1 359.6	215.5	5 575.2
Public works	7 996.3	3 384.3	—	—	11 380.6
Veterinary services	560.9	133.5	—	—	694.4
Public libraries	268.3	196.3	—	—	464.6
Public assistance and poor relief	3 678.4	435.8	—	—	4 114.2
Loan repayments	—	775.3	2 648.2	154.3	3 577.8
Fire brigade and ambulance	677.2	122.3	—	—	799.5
Administration establishment and other charges	14 437.9	5 280.0	3 892.8	3 191.4	26 802.1
Electricity schemes	—	11 540.3	10 064.7	6 134.8	27 739.8
TOTAL	40 745.4	27 848.4	27 925.7	14 092.9	110 612.4
Expenditure on capital account	2 377.1	2 561.8	1 103.0	350.9	6 393.4
TOTAL EXPENDITURE	43 123.1	30 410.2	29 028.7	14 443.8	117 005.8

TABLE 12. Educational structure of active labour force by sector, 1969/70 (percentages of sector totals)

	Urban	Rural	Estate	Total
No schooling	7	10	43	16
First level, grades 1-5	30	39	48	39
Second level, grades 6-10	40	37	8	32
Passed 'O' level	19	13	1	12
Passed 'A' level or above	3	1	—	1
TOTAL [1]	100	100	100	100

1. May not equal the sum of items, because of rounding.

TABLE 13. Non-estate labour force by education and age, 1969/70 (thousands)

Age groups	15-24	25-34	35-44	45-54	55-59
No schooling	51	43	106	77	29
First level, grades 1-5	316	232	289	239	73
Second level, grades 6-10	460	286	228	163	43
Passed 'O' level	167	140	78	47	10
Passed 'A' level or above	15	23	7	3	1
TOTAL	1 009	724	708	529	156

SOURCE *Matching employment opportunities and expectations*, op. cit.

Appendix II

TABLE 1. Trend of teachers in first- and second-level education, 1960-69

	1960		1961	
	Amount	Percentage	Amount	Percentage
Graduates	3 429	4.9	7 434	8.6
Non-graduates	66 229	95.1	78 655	91.4
of which: diploma-holders	22 361	32.1	38 775	45.1
certificated	18 878	27.1	17 519	20.3
non-certificated	24 990	35.9	22 361	26.0
TOTAL	69 658	100.0	86 089	100.0
of which: first level	53 888	77.4	65 423	76.0
second level	15 770	22.6	20 666	24.0
Pupil/teacher ratios:				
first level		35.3		33.2
second level		13.4		15.6

SOURCE IIEP estimates.

TABLE 2. Trend of 'new enrolments' in technical education

	1965/66	1966/67	1967/68	1968/69
Ministry of Education establishments				
Junior Technical Institutes	535	675	920	1 050
Other establishments	577	541	738	816
TOTAL	1 112	1 216	1 658	1 866

Establishments not responsible to the Ministry of Education

	1965	1968 [1]
Technicians	260	567
Craftsmen	4 286	4 809
Total 'Ministerial Departments'	4 546	5 376
Technicians	39	124
Craftsmen	297	1 595
Total 'communes and co-operatives'	336	1 719
Technicians	299	691
Craftsmen	4 583	6 404
GRAND TOTAL	4 882	7 095

1. Estimated figures, biased upwards.

TABLE 3. Ministry of Education, senior and junior technical institutes. 1967-68

	H.T.C. Katubedda		S.T.I. Amparai		C.T.C. Maradana		J.T.I. Kurunegala		J.T.I. Kegalla		J.T.I. Anuradhapura		J.T.I. Badulla		J.T.I. Jaffna		J.T.I. Kandy		J.T.I. Galle		J.T.I. Ratnapura	
	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.	F.T.	P.T.
Name of course																						
1. Trades							54	91	70	33	62	14	76	25	129	101	99	97	83	—	239	—
2. Commerce							49	68	43	44	—	—	25	45	278	50	96	112	95	—	—	—
3. Surveying & levelling							—	—	—	—	—	—	—	—	25	47	17	—	18	—	—	—
4. Electrical engineering							—	—	—	—	—	—	—	—	57	—	33	—	—	—	—	—
5. Mechanical engineering							—	—	—	—	—	—	—	—	67	—	24	—	27	—	—	—
6. Structural engineering							—	—	—	—	—	—	—	—	—	—	28	—	24	—	—	—
7. Building construction							—	—	—	—	—	—	—	—	94	—	—	—	—	—	—	—
8. Preliminary engineering							—	47	—	—	—	—	—	10	49	—	—	37	—	29	—	—
Total no. of students	700	723	220	—	704	423	103	206	113	77	62	13	121	56	452	465	212	331	196	80	239	—
Total full time [1]	1 182		220		986		263		169		72		164		762		470		250		239	
Total no. of teachers	55	42	26	6	32	69	11	20	12	—	8	5	16	4	20	43	23	31	17	—	16	—
Total full time [1]	65		28		49		16		12		9		17		31		31		17		16	
Teacher/student ratio	65:1182		28:220		49:986		16:263		12:169		9:72		17:164		31:762		31:470		17:250		16:239	
	1:18		1:9		1:21		1:16		1:14		1:8		1:10		1:21		1:15		1:15		1:15	
Expenditure (rupees)																						
1. Personal emoluments and other payments	923	262	408	786	478	397	99	071	94	343	79	189	97	482	195	055	172	636	170	665	62	785
2. Facilities & services	41	844	24	905	8	546	6	950	5	978	2	264	7	678	3	537	8	265	7	711	3	650
3. Students and welfare	9	900	6	453	5	580	6	040	3	200	1	025	2	300	4	255	2	465	1	780	4	780
4. Stores and equipment	95	064	26	250		486	5	000	13	500		—	9	500		—	6	744	40	731	30	000
5 Maintenance and improvements to buildings	6	240	19	488	94	371	20	000	15	000	24	297	20	000	6	047	211	334	20	000	101	215
Total recurrent expenditure	1 076	310	485	882	587	583	137	061	132	021	106	775	136	561	208	896	211	254	240	887	1	733
Expenditure per student [1]		910		2 208		596		521		791		1 485		835		278		449		963		423

1. Part time students are converted to full time students on the ratio 2 F.T. = 3 P.T. Part time teachers are converted on the ratio 1 F.T. = 4 P.T.
2. Average expenditure per student: 700 rupees.

TABLE 4. Craft level: training facilities outside the Ministry of Education

Establishment	Course	Duration	Intake			
			1965	1966	1967	1968
Government departments						
Department of Agriculture	Practical farming	1 year	860	860	804	804
Port Commission, Colombo	Trade apprentices	4 years	—	70	—	68
—do—	—do— (outsiders)	½-2 years	44	7	5	33
Ceylon Govt. Railway	Trade apprentices	4 years	15	15	15	15
Dept. of Labour	Tractor op. & mechsm.	18 months	—	—	44	44
—do—	Motor mechanism	18 months	—	—	24	24
—do—	Welding	3 months	16	17	12	12
—do—	Fitting	6 months	20	20	24	24
—do—	Sheet metal work	18 months	16	35	—	35
—do—	Machining	6 months	—	41	15	15
—do—	Masonry	6 months	224	288	288	608
—do—	Carpentry	9 months	388	144	384	384
—do—	Radio servicing & repair	9 months	16	—	41	41
—do—	Electrical wiring	18 months	20	20	—	20
—do—	Hair dressing	6 months	216	216	228	228
—do—	Domestic helpers	6 months	50	50	50	50
Dept. of Rural Dev.	Iron works	3 years	15	17	17	17
—do—	Carpentry	2-3 years	1 065	1 065	1 065	1 065
—do—	Weaving, handlooms	2 years	1 127	1 029	—	1 029
Dept. of Irrigation	Driller learners	1 year	—	—	—	5
Dept. of Posts	Trade apprentices (telec.)	15 months	142	178	189	189
Dept. of Govt. Elec. Unds.	—do— (electl)	1 year	—	40	—	40
Dept. of Govt. Printing	—do— (mono cast)	3 years	6	7	7	7
—do—	—do— (mono keyboard)	3 years	10	10	10	10
—do—	—do— (lino)	3 years	7	10	4	4
—do—	—do— (book binding)	3 years	29	43	38	38
State corporations						
River Valleys Development	Practical agriculture	2 years	—	—	400	400
—do—	Mechanical training	18 months	—	—	45	45
—do—	Wood handicraft	1 year	—	—	18	18
—do—	Weaving	6 months	—	—	25	25
Ceylon Transport Board	Motor mechanism	4 years	70	100	300	100
—do—	Worker trainees	1 year	100	100	100	100
Ceylon Cement Corp.	Trade apprentices	3 years	27	—	63	63
Ceylon Steel Corp.	Trade apprentices (mech)	2½ yrs.	—	7	55	55
Port Cargo Corporation	Trade apprentices	4 years	34	—	40	40
Co-operative Wholesale	—do— printing	5 years	4	—	—	4
Ceylon Leather Products	Apprentices leather	3 years	—	18	3	3
—do—	—do— shoe manufacture	3 years	—	72	53	53
Ceylon Tyre Corporation	Tyre production	15 months	—	—	—	550
Ceylon Ceramics Corp.	Trade apprentices	2 yrs.	22	194	139	139
Private firm						
Colombo Commercial Co.	Trade apprentices	4 years	40	40	40	40

Output				Cost per head (rupees)				Staff		Remarks
1965	1966	1967	1968	1965	1966	1967	1968	Tech.	Other	
684	714	—	700	—	600	460	—	40	34	Training
19	17	2	22	989	1 115	1 365	1 312	5	6	Apprenticeship
8	9	6	2	-do-	-do-	-do-	-do-	-do-	-do-	A
11	11	11	11	3 512	3 512	3 512	3 512	8	—	A
—	—	—	44	—	—	3 909	—	—	—	T
20	—	20	20	1 596	1 330	3 771	—	2	—	T
12	—	15	15	2 260	1 845	2 042	5 764	1	2	T
15	—	18	18	1 345	1 146	1 586	1 910	1	2	T
—	15	—	18	—	2 580	1 715	—	1	2	T
20	—	17	17	681	873	3 683	—	2	1	T
2 216	200	256	250	715	715	715	604	16	32	T
183	144	117	117	1 586	793	1 586	1 066	16	32	T
12	16	20	20	1 270	1 176	—	550	1	—	T
19	—	—	20	1 846	1 905	1 745	—	1	—	T
134	180	104	104	630	630	630	—	18	—	T
35	38	22	22	698	698	698	—	—	—	T
3	5	—	5	121	121	11[illegible]	115	1	—	T
1 065	1 065	1 065	1 065	200	200	200	200	71	—	T
392	637	—	637	—	—	—	—	109	—	T
—	—	—	5	—	—	—	—	—	—	A
142	178	—	150					5	3	A
		37	40			3 000		6	10	A
1	—	—		484	531	451	—	—	—	A
2	—	—	15	430	430	430	—	—	—	A
—	6	—		451	587	246	—	—	—	A
6	5	6		484	577	446	—	—	—	A
—	—	—	200	—	—	—	—	10	4	T
—	—	—	30	—	—	1 111	—	4		T
—	—	—	18	—	—	1 333	—	3	1	T
—	—	—	25	—	—	649	—	2	—	T
60	60	60	60		3 243	2 082	2 842	30	74	A
—	100	100	100							T
—	—	—	20	1 500	1 500	1 560	1 560	—	—	A
—	—	—	20	—	—	—	—	—	—	A
—	—	—	10	676	1 000	308	—	—	—	A
—	—	—	4	—	—	—	—	—	—	A
—	—	—	6	—	675	750	900	—	—	A
—	—	—	20	—	675	675	675	—	—	A
—	—	—	500	—	—	—	—	—	—	A
9	5	22	22	493	687	1 128	—	3	—	A
40	40	40	40	5 360	5 360	5 360	5 360	6	—	A

TABLE 5. Technical level: training facilities outside the Ministry of Education

Establishment	Course	Duration	Intake 1965	1966	1967	1968
Government departments						
1. Dept. of Agriculture	Agriculture	2 years	88	154	149	—
2. Ceylon Govt. Railway	Apprentice mechanical	5 years	34	—	—	—
3. —do—	—do— draughtsman civil	2 yearss	—	2	—	—
4. —do—	—do— surveying & lev.	4 year	—	4	—	—
5. —do—	—do— draughtsman mech.	6 years	—	5	—	—
6. —do—	—do— civil	4 years	20	—	—	—
7. Dept. of Irrigation	Mechanical	5 years	—	—	—	30
8. —do—	Draughtsmen	3 years	—	30	21	20
9. —do—	Irrigation learners	2 years	101	—	183	—
10. Port Commission, Colombo	Apprentices marine & mech.	2-4-5 yrs.	5	—	—	—
11. —do—	Apprentices supervisors	5 years	—	15	—	—
12. Dept. of Posts & Telecommunic.	Apprentices elec. eltrn.	1 year	—	3	—	—
13. —do—	—do— telegraphic	1 year	—	17	—	—
14. Dept. of Surveyin.gInst. Sp.Mp.	Surveying & mapping	1 year	—	—	—	52
15. —do—	Apprentice draughtsmen	3 years	12	—	14	13
16. Dept. of Civil Aviation	Pilot licence. pri. & com.	1-2 yrs	—	6	15	—
State corporations						
17. Port Cargo Corporation	Apprentices foreman	5 years	2	1	—	—
18. —do—	Apprentices marine	4 years	2	—	—	—
19. Ceylon Transport Board	Junior engineers mechnical	3 years	—	—	—	7
20. —do—	Junior engineers civil	3 years	—	4	—	2
21. —do—	Apprentice foreman mech.	5 years	—	5	7	8
22. —do—	Apprentice building supervisor	5 years	—	5	—	7
23. —do—	Apprentice draughtsmen civil	5 years	3	2	—	—
24. —do—	—do— mechanical	5 years	—	2	—	—
25. Ceylon Ceramics Corporation	Apprentice ceramics	2 years	10	—	—	—
26. —do—	Apprentice civil mech. & ele.	3 years	7	20	—	—
27. River Valley Dev. Board.	Apprentice draughtsman	2 years	—	17	—	—
28. Ceylon Textile Corporation	Apprentice foreman textile	1-2 years	—			
29. State Engineering Corporation	App. civil engineering	3 years	—	—	—	30
30. Colombo Commercial Co. Ltd.	Apprentice civil, mech. & ele.	4 years	10	10	10	10
31. —do—	Apprentice minor suprs.	4½ yrs.	5	5	5	5

Output				Cost per head (rupees)				Staff		
1965	1966	1967	1968	1965	1966	1967	1968	Tech.	Other	Remarks
64	76	—	24	747	262	602	—	25	12	Training
—	—	—	34	4 276	4 276	4 276	4 276	1	—	Apprenticeship
—	—	—	—	5 225	5 500	—	—	—	—	A
—	—	—	—	4 925	3 698	5 667	—	—	—	A
—	—	—	—	5 210	5 210	5 210	5 210	1	—	A
4	—	—	4	2 668	2 010	2 275	—	—	—	A
—	—	—	—							A
										A
—	—	101	—							A
2	2	6	1	989	1 115	1 365	1 312	5	6	A
—	—	—	—	–do–	–do–	–do–	–do–	–do–	–do–	A
7	—	3	—	2 930		4 540	—	1	1	A
10	—	17	—	3 190	2 640	—	—	1	1	A
—	—	—	44	—	—	—	8 192	17	54	T 37 absorbed
19	4	13	14							A
—	3	7	—	—	1 558	3 444	—			T
—	—	—	—	1 500	1 833	2 083	—	—	—	A
—	—	—	—	1 500	1 833	2 080	—	—	—	A
—	—	—	—	4 380	4 380	4 380	4 380	—	—	A
—	—	—	—	–do–	–do–	–do–	–do–	—	—	A
—	—	—	—	2 400	2 400	2 400	2 400	—	—	A
—	—	—	—	–do–	–do–	–do–	–do–	—	—	A
—	—	—	—	–do–	–do–	–do–	–do–	—	—	A
—	—	—	—	–do–	–do–	–do–	–do–	—	—	A
2	—	—	—	285	1 895	—	—	3	—	A
—	—	—	—	3 600	3 960	4 320	4 320	—	—	A
—	—	—	—	—	1 853	1 850	—	2	—	A
—	—	—	—							
10	10	10	10	5 360	5 360	5 360	5 360	6	—	A
5	5	5	5	–do–	–do–	–do–	–do–	—do—	—	A

TABLE 6. Total enrolment in specialist teacher-training colleges, 1971

Department	Male	Female	Department	Male	Female
Naharagama			*Palaly*		
Visually handicapped	45		Agriculture	14	
Physical training	15		English	103	87
Agriculture	76		Science	44	25
English	175	239	Maths	75	16
Science	148	120	Commerce	38	8
Maths	150	102	Handicrafts	15	10
Commerce	154	54	Home science	—	35
Handicrafts	47	48			
Home science	—	74	Sub-total	289	181
			Total	470	
Sub-total	810	655			
Total	1 465				
			Peradeniya		
			English	164	107
			Total	470	
GRAND TOTAL				2 206	

SOURCE *Medium-term plan*, op. cit.

TABLE 7. Total enrolment in general teacher-training colleges, 1971

College	Male	Female	Total
Sinhala medium			
1. Gampola	—	161	161
2. Anuradhapura	—	118	118
3. Amarasuriya Galle	—	202	202
4. Mirigama	445	—	445
5. Balapitiya	200	97	297
6. Polgolla	—	488	488
7. Uyanwatta	—	471	471
8. Nittambuwa	103	—	103
9. Kottawa	114	—	114
10. Giragama	162	—	162
11. Bandarawela	156	—	156
12. Matara	35	57	92
13. Bolawalana	131	265	396
14. Hingurakgoda	119	—	119
15. Katukurunda	430	—	430
16. Dambadeniya	86	—	86
17. Museus	—	403	403
18. Eswatta	81	—	81
Tamil medium			
19. Kopay	—	130	130
20. Batticaloa	48	57	105
21. Nallur	65	—	65
22. Colombagam	67	—	67
23. Aluthgama	—	102	102
24. Addalatchnai	297	—	297
GRAND TOTAL	2 539	2 551	5 090

SOURCE *Medium-term plan*, op. cit.

TABLE 8. General indicators of the development of the school system around 1969

	Total		Total
A. *Enrolments (thousands)*		C. *Examinations (thousands)*	
1. Grade 1	462	23. Number sitting GCE 'O' level [1]	1 203
2. Grade 8	146	24. Number sitting GCE 'A' level [1]	31.4
3. Grades 1-8	2 298	25. Number passes at GCE 'O' level	487
4. Grade 9 arts	93		
5. Grade 9 sciences	28	D. *Ratios*	
6. Grade 9	121	a. 1/17	137.5
7. Grade 10	176	b. 3/18	89.3
8. Grade 11 arts	15	c. 6/2	82.9
9. Grade 11 sciences	6	d. 4/2	63.7
10. Grade 11	21	e. 5/2	19.2
11. Grades 11 + 12	45	f. 6 + 7/19	52.5
12. Technical	12	g. 8/7	8.5
13. Teacher training	7	h. 9/7	3.4
14. Total second level	361	i. 10/7	11.9
15. Admission to third level	4	j. 11/20	8.4
16. Total third level	13.4	k. 12/20 + 19	1.1
B. *Age groups (thousands)*		l. 13/20 + 19	0.6
17. 5-6	336	m. 14/20 + 19	32.8
18. 5-13	2 572	n. 15/21	1.6
19. 14 and 15	566	o. 16/22	1.4
20. 16 and 17	537	p. 24/22	40.5
21. 18	257	q. 23/22-10	130.8
22. 18-21	954	r. 15/23	12.7

1. Aggregate of all disciplines in 1968.
SOURCE IIEP estimates.

TABLE 9. Enrolment ratios in second-level education (thousands)

	1960	1965	1970
Junior second level			
Enrolment (grade 9-10)	207.8	294.2	295.1
Technical	2.2	6.0	10.0
Total	210.0	300.2	305.1
Population of age-group 14/15 and 15/16	406.8	488.1	551.0
Apparent enrolment ratio (percentage)	51.5	61.5	55.4
Senior second level			
Enrolment (grade 11-12)	17.4	46.4	44.4
Teacher training	4.8	5.3	6.0
Total	22.2	51.7	50.4
Population of age-group 16/17 and 17/18	377.0	453.7	522.0
Apparent enrolment ratio (percentage)	5.9	11.4	9.7

SOURCE: IIEP estimate.

TABLE 10. University teaching staff in 1968/69

	Professors		Reader/ Senior Lecturer		Assist. Lecturer		Demonstrator/ Tutor Instructor		Total		Assistant Lecturer Actual	
	Ap.	Ac.	Ap.	Ac.	Ap.	Ac.	Ap.	Ac.	Ap.	Ac.	Per.	Temp.
Arts	39	31	195	149	239	210	72	70	545	460	146	64
Science	24	19	64	44	120	87	66	54	274	204	48	39
Engineering	7	4	27	11	40	19	48	43	122	77	15	4
Medicine	25	19	110	84	5	3	15	40	155	146	2	1
Agriculture/ Veterinary science	5	3	17	13	12	13	2	8	36	37	6	7
TOTAL	100	76	413	301	416	332	203	215	1 132	924	217	115

Ap. = approved; Ac. = actual; Per. = permanent; Temp. = temporary.
SOURCE: Ceylon university returns, 1968.

TABLE 11. Number of teachers employed in the schools in each education district, September 1970, according to qualifications held

Education district	Government schools													
	Grand total		Trained grad.		Science grad. (untrained)		Arts grad. (untrained)		Trained teach.		Certificated teachers		Specialist	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
Homagama	3 391	2 262	58	17	33	11	274	127	1 430	909	925	713	129	59
Colombo North	10 168	6 455	88	25	49	16	609	238	4 562	2 668	2 834	2 145	422	208
Colombo South	9 372	6 594	216	123	167	105	751	495	3 490	2 322	1 661	1 412	391	255
Kalutara	5 853	3 722	57	15	38	22	391	167	2 369	1 324	1 587	1 214	243	108
Matale	2 148	1 021	21	7	15	6	101	21	953	329	387	249	67	24
Kandy	8 373	4 333	106	40	68	34	526	163	3 466	1 389	1 600	1 133	341	112
Nuwara-Eliya	2 906	1 174	15	2	16	6	117	14	1 156	288	345	176	77	25
Galle	6 286	3 890	56	14	35	7	478	158	2 169	1 123	1 887	1 403	207	74
Matara	4 824	2 817	31	4	7	2	296	73	1 756	771	1 290	943	149	48
Tangalla	2 147	1 007	11	1	—	—	87	12	934	286	335	198	54	13
Jaffna	6 001	2 803	160	37	285	110	401	190	3 252	1 396	774	382	287	147
Mannar	536	207	5	1	3	—	9	4	346	117	39	30	23	8
Vavuniya	688	267	8	—	7	2	23	6	465	169	44	17	22	4
Batticaloa	1 024	394	5	1	24	12	34	8	578	191	71	43	37	19
Trincomalee	1 598	630	9	1	35	13	45	25	1 064	377	107	70	49	12
Amparai	541	192	3	1	—	—	13	4	293	49	57	36	19	2
Kalmunai	1 170	278	5	1	10	3	21	5	821	187	50	20	17	3
Kurunegala	3 982	1 868	12	1	22	10	163	24	1 810	623	732	468	708	462
Chilaw	6 975	3 378	43	8	36	10	410	89	2 956	1 061	1 412	895	235	70
Anuradhapura	2 811	1 067	18	1	5	—	117	18	1 400	310	326	198	93	17
Polonnaruwa	808	317	2	1	2	1	40	7	382	80	116	48	17	2
Bandarawela	909	274	2	—	—	—	26	2	509	69	105	49	30	3
Monaragala	1 627	1 073	14	3	10	2	132	26	1 236	327	326	190	69	23
Kegalla	5 530	2 826	51	10	16	4	265	65	2 287	847	1 090	723	241	75
Ratnapura	3 915	1 921	18	5	12	7	203	44	1 596	562	741	454	142	43
TOTAL	94 583	50 770	1 014	319	895	383	5 532	1 985	41 280	17 769	18 841	13 209	4 069	1 816

SOURCE *Medium-term plan*, op. cit.

TABLE 12. Recurrent out-of-school education expenditure

	1969/70	1970/71	1971/72
Adult education	28 224	31 000	30 000
Education for the physically handicapped	11 538	84 000	105 000

SOURCE Budget estimates.

TABLE 13. Standard school building types

Type	Overall size (feet)	Materials			Cost (rupees)
		Floor	Roof	Wall	
2 Classrooms	40 × 20	cement	tiles	brick	12 000
2 Classrooms with store & office	60 × 20	"	"	"	20 000
3 Classrooms	60 × 20	"	"	"	18 000
3 Classrooms with store & office	80 × 20	"	"	"	26 000
4 Classrooms	80 × 20	"	"	"	24 000
4 Classrooms with store & office	100 × 20	"	"	"	32 000
5 Classrooms	100 × 20	"	"	"	30 000
5 Classrooms with store	120 × 20	"	"	"	36 000
Workshop	84 × 20	"	"	"	35 000
Science lab. (old)	30 × 35	"	asbestos	"	29 000
Science lab. (new)	60 × 20	"	tiles	"	45 000
Teachers' quarters (First-level school)	36 × 20	"	"	"	17 000
Teachers' quarters (Second-level school)	40 × 30	"	asbestos	"	28 000
Agricultural unit	43 × 17	"	"	"	20 000
Multipurpose unit	60 × 20	"	tiles	"	25 000
Commerce unit	50 × 20	"	"	"	21 000
Home science unit	74 × 20	"	asbestos	"	55 000
Social studies unit	50 × 25	"	"	"	40 000
Assembly hall	110 × 30	"	"	"	100 000
2-storey 8-classroom building	100 × 20	"	"	"	125 000

TABLE 14. Analysis of construction costs (rupees)

Type of building	Approx. cost per sq. ft.	Type of building	Approx. cost per sq. ft.
Classroom	15.50	Commerce unit	21.00
Science laboratory	27.50	Multipurpose unit	21.00
Workshop	21.00	Teachers' quarters	27.50
Agricultural unit	27.50	Assembly hall	30.00
Home science unit	30.00	2-storey classrooms	31.00
Social studies unit	30.00		

TABLE 15. Regional percentages of school leavers and repeaters, 1967

Region	Grade 1		Grade 2		Grade 3		Grade 4		Grade 5		Grade 6		Grade 7		Grade 8	
	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L
Colombo South	19.1	0.8	20.4	1.0	21.5	1.5	9.8	1.5	14.3	3.3	14.8	3.4	16.9	3.9	14.9	4.8
Colombo North	22.0	0.6	20.1	0.9	21.1	1.6	9.8	2.1	14.8	3.7	14.2	4.4	13.6	5.3	13.9	5.5
Kalutara	24.1	0.9	20.4	1.4	22.2	2.6	9.0	2.1	13.2	4.5	14.5	4.9	12.0	5.4	12.2	5.4
Kandy	27.1	1.2	21.7	2.0	22.5	2.6	9.7	2.7	13.1	4.5	14.4	5.2	12.6	5.3	12.8	5.1
Nuwara-Eliya	29.3	2.0	23.5	3.2	22.9	4.0	8.6	3.8	12.4	6.5	11.2	6.1	9.2	5.9	10.8	5.7
Galle	22.1	1.7	20.6	1.4	22.8	2.3	9.8	2.4	14.5	4.7	14.5	4.7	12.1	4.8	12.5	4.1
Matara	29.0	1.7	23.1	2.7	25.6	3.6	10.4	4.1	14.4	6.9	16.7	7.1	12.4	6.9	12.8	6.2
Jaffna	31.4	0.5	22.4	1.2	22.2	2.0	11.4	2.5	15.6	3.6	14.8	3.6	15.6	4.2	17.8	3.8
Batticaloa	38.5	4.2	26.1	6.1	26.6	7.4	13.8	7.1	17.3	10.4	16.4	8.0	14.0	8.6	13.5	6.8
Kurunegala	27.6	1.6	19.7	2.3	20.7	3.6	8.2	3.6	12.2	6.2	10.7	6.8	9.6	6.5	10.1	5.4
Chilaw	32.9	1.6	23.8	2.0	23.9	4.0	11.5	4.6	15.8	7.8	14.5	8.9	13.4	8.1	13.7	7.5
Anuradhapura	9.6	0.0	21.6	14.1	21.9	3.9	9.3	4.3	11.6	7.3	11.6	7.0	10.4	6.9	9.8	6.2
Bandarawela	30.3	13.6	24.5	3.2	24.3	4.1	8.7	3.5	11.6	6.8	9.9	10.1	11.3	6.6	12.6	5.9
Kegalla	29.1	1.4	22.4	1.8	23.4	3.6	11.0	3.0	15.0	4.8	15.0	6.3	11.1	4.8	11.0	4.8
Ratnapura	27.8	2.5	23.1	2.8	23.9	3.6	9.4	3.8	13.6	6.3	13.5	7.4	11.4	6.4	13.4	5.0
Average	22.2	1.5	22.0	2.3	23.9	3.4	10.4	3.3	14.1	5.5	14.0	5.9	12.8	5.7	13.0	5.3

R = repeaters; L = school leavers.
SOURCE *Perspectives for the development of second-level general education*, op. cit.

TABLE 16. Regional percentages of school leavers and repeaters, 1967

Region	Grade 9 arts		Grade 9 sc.		Grade 10 A.		Grade 10 S.		Grade 11 A.		Grade 11 S.		Grade 12 A.		Grade 12 S.	
	R	L	R	L	R	L	R	L	R	L	R	L	R	L	R	L
Colombo South	6.0	6.9	5.4	0.8	37.9	14.6	35.2	2.5	9.8	16.0	1.5	2.2	37.0	14.0	24.9	4.1
Colombo North	7.1	7.1	4.2	0.9	39.8	15.5	31.9	5.8	12.4	19.2	9.6	2.6	36 8	12.5	32.2	8.6
Kalutara	5.0	6.3	1.5	1.4	44.7	17.5	38.2	4.6	5.6	21.1	0.2	7.3	44.0	15.5	28.6	2.7
Kandy	8.1	5.3	11.1	1.6	40.3	12.5	42.7	4.4	10.6	17.2	2.2	11.4	40.5	15.1	26.9	11.4
Nuwara-Eliya	5.0	5.4	11.7	1.2	33.9	13.3	39.1	5.6	9.6	19.8	—	—	32.1	16.2	91.4	51.4
Galle	5.9	7.6	6.3	0.4	41.9	12.0	38.8	6.4	6.5	17.9	1.8	2.8	46.9	17.3	21.0	5.6
Matara	3.8	4.3	3.1	0.7	43.4	0.6	31.2	3.0	8.1	14.0	4.3	—	41.2	14.6	34.6	12.4
Jaffna	9.9	5.0	4.6	1.0	37.5	13.0	39.6	6.4	3.4	28.6	1.0	17.1	23.2	15.8	24.2	7.6
Batticaloa	13.1	10.1	8.9	2.0	36.0	17.5	32.1	4.9	6.1	30.2	29.4	0.0	19.1	11.3	—	—
Kurunegala	6.6	6.1	7.6	1.5	41.6	11.5	26.9	2.9	5.6	17.2	3.0	6.0	33.4	14.7	25.4	17.8
Chilaw	7.0	7.5	3.2	1.0	39.1	15.4	31.9	5.9	4.6	20.8	0.0	2.7	50.2	16.8	37.5	6.2
Anuradhapura	6.5	6.9	11.0	1.3	41.3	12.1	23.1	6.6	6.1	15.8	11.1	1.3	28.2	18.4	—	—
Bandarawela	4.6	6.8	2.9	—	34.6	17.5	17.6	10.0	3.4	21.3	—	—	28.1	21.1	—	—
Kegalla	7.8	5.8	11.8	0.0	45.7	11.9	27.2	3.6	12.7	15.9	9.0	10.8	43.5	12.3	21.3	11.5
Ratnapura	6.2	5.2	10.0	0.0	41.1	14.7	28.5	2.9	6.1	22.7	13.1	2.6	33.8	21.1	45.9	29.7
Average	6.7	6.1	6.3	1.0	40.7	13.7	35.5	4.9	7.9	19.3	3.2	7.1	38.9	15.3	26.7	7.9

A. = arts; S. = science; R = repeaters; L = school leavers.
SOURCE *Perspectives for the development of second-level general education*, op. cit.

TABLE 17. An analysis of the results of the GCE 'O' level, London, 1965 [1]

Subject	No. sat	No. passed	Percentage of passes	Passes expressed as a percentage of the corresponding age-group
English language	348 688	190 497	54.6	25.2
Religious knowledge	65 235	37 525	57.5	5.0
Welsh language	1 368	902	65.9	0.1
Mathematics	234 289	138 854	59.3	18.3
History (includes ancient history)	146 262	82 585	56.4	10.9
Geography	160 765	90 449	61.9	11.9
Needlework	19 861	12 066	60.8	1.6
Agricultural & horticultural science	1 290	788	61.1	0.1
Applied mathematics & mechanics	1 631	895	54.9	0.1
Physics	98 089	54 335	55.4	7.2
Chemistry	77 509	44 833	57.8	5.9
Biology	128 285	72 695	56.7	9.6
Economics	20 167	10 389	51.5	1.4
Metalwork	15 340	8 888	57.9	1.2
Woodwork	19 819	11 734	59.2	1.5

1. Compare with Table 65, page 88.
SOURCE Statistics of Education, *Annual abstract of statistics*, H.M.S.O. 1967.

TABLE 18. Distribution of pupils and teachers by education districts (government schools only)

	No. of pupils	No. of teachers	Pupils per teacher
Colombo North	245 875	9 432	26.1
Colombo South	211 570	7 416	28.5
Homagama	83 405	3 105	26.9
Kalutara	144 116	5 214	27.6
Matale	63 207	1 963	32.2
Kandy	226 286	7 536	30.0
Nuwara-Eliya	78 910	2 189	36.0
Galle	164 444	5 941	27.7
Matara	138 220	4 616	29.9
Tangalla	77 035	2 253	34.2
Jaffna	162 530	5 410	30.0
Mannar	14 817	470	31.5
Vavuniya	19 314	666	29.0
Trincomalee	35 511	1 069	33.2
Batticaloa	44 937	1 464	30.7
Amparai	19 670	551	35.7
Kalmunai	32 436	1 126	28.8
Chilaw	111 121	3 821	29.1
Kurunegala	198 266	6 643	29.8
Anuradhapura	85 501	2 899	29.5
Polonnaruwa	33 842	964	35.1
Moneragala	32 089	896	35.8
Bandarawela	73 388	2 522	29.1
Kegalla	137 738	5 158	26.7
Ratnapura	115 923	3 805	30.5
TOTAL	2 550 151	87 129	29.3

NOTE Pupil numbers are derived from the School Census of September 1970 and teacher numbers (which include school principals) from a survey conducted in May 1971.
SOURCE *Medium-term plan*, op. cit.

TABLE 19. Structure of the school-age population (thousands)

Age	1963 Census	1970 estimate	Age	1963 Census	1970 estimate
5	309	337	12	258	294
6	301	335	13	250	286
7	292	334	14	241	279
8	285	332	15	232	272
9	278	327	16	224	265
10	272	314	17	216	—
11	265	303			

TABLE 20. Institutional courses: number completing the courses in the years 1969-72

		1969	1970	1971	1972
Post-graduate trained					
Diploma in education	Sinhala		113	140	
	Tamil		22	25	
	TOTAL		135	165	
Second-level trained					
English	Sinhala	254	312	311	374
	Tamil	39	65	68	122
Science	Sinhala	141	141	130	136
	Tamil	28	16	21	48
Mathematics	Sinhala	94	113	114	138
	Tamil	29	16	24	67
Commerce	Sinhala	67	71	131	95
	Tamil	19	22	14	32
Handicrafts (Males)	Sinhala	23	21	19	28
	Tamil	10	10	7	8
Handicrafts (Females)	Sinhala	—	20	23	26
	Tamil	—	—	6	4
Home Science	Sinhala	36	34	34	40
	Tamil	9	10	13	22
Agriculture	Sinhala	—	—	32	44
	Tamil	—	—	—	14
Physical Education	Sinhala	—	—	43	17
	Tamil	—	—	—	—
	TOTAL	749	851	990	1 215
First-level trained					
Sinhalese	Male	1 152	1 188	1 310	752
	Female	497	534	691	1 510
Tamil	Male	102	37	118	62
	Female	75	102	87	100
Muslim	Male	101	104	94	203
	Female	20	11	58	44
	TOTAL	1 947	1 976	2 358	2 671

SOURCE *Medium-term plan*, op. cit.

TABLE 21. Population of Sri Lanka of 5 years of age and over by literacy and sex (thousands)

	Census 1946		Census 1953		Census 1963	
	Literate	Percentage	Literate	Percentage	Literate	Percentage
Total	3 353	57.8	4 509	65.4	6 453	71.9
Males	2 171	70.1	2 777	75.9	3 719	79.4
Females	1 182	43.8	1 732	53.6	2 734	63.8

'*Adult Education*: Seventy-two Adult Education Centres and classes attended by 2,532 males and 942 females functioned satisfactorily during this year. There are sixty centres where English is taught. National dancing and music are fostered in all centres and in thirty-five centres, lessons in sewing, needlework and handicrafts are conducted. Masks, caps, toys, dolls, flutes, walking-sticks, handbags and baskets are manufactured in several adult education centres. Sports material, transistor radios, musical instruments and library books were issued to centres which maintained a high average attendance.' In 1970, average monthly attendance in 3 centre schools is 360 adults. 30 centres were closed down temporarily in 1971.

From *Administration Report of the Director General of Education for the year 1966-1967.*

SOURCE Department of Census and Statistics.

TABLE 22. Urban and rural leadership programme

	1966	1967	1968
Number of development societies	8 680	8 680	8 411

TABLE 23. Social service institutions [1]

Institutions		1963	1964	1965	1966	1967	1968
Homes for the aged	A [2]	4	4	4	4	4	4
	B	35	36	36	37	38	40
Cottage homes for the aged [3]	A	6	6	7	7	9	9
	B	—	—	—	—	—	—
Institutions for the physically handicapped	A	2	2	2	2	3	2
	B	19	22	23	21	18	19
Creches	A	—	—	—	—	—	—
	B	66	68	72	77	85	96
Boys and girls homes	A	—	—	—	—	—	—
	B	26	29	29	35	34	41
Voluntary agencies engaged in outdoor relief work	A	—	—	—	—	—	—
	B	—	—	—	—	52	67

1. Figures relate to the year ended September 30.
2. A = state managed; B = privately managed.
3. These institutions are run by Ad Hoc Committees and managed by Divisional Revenue Officers.

SOURCE *Statistical pocket book of Ceylon.*

TABLE 24. Indicators of cultural development

	1966	1967	1968
1. *Publishing*			
Number of titles published	1 199	1 534	1 570
Number of school textbooks	...	...	289
Number of childrens' books	...	...	21
Number of translations	77	85	...
2. *Newspapers and periodicals*			
Number of daily papers	...	16	17
Average circulation per 1 000 population	...	510	525
Number of periodicals (1965)	400	...	...
Average circulation per 1 000 population (1965)	824	...	...
Consumption of newsprint per 1 000 population (kg)	...	1 300	1 100
3. *Radio and television*			
Number of radio sets per 1 000 population	...	29	33

... Data not available.

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The following books, published by Unesco: IIEP, are obtainable from the Institute or from Unesco and its national distributors throughout the world:

Educational cost analysis in action: case studies for planners (1972. Three volumes)

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The new media: memo to educational planners by W. Schramm, P.H. Coombs, F. Kahnert, J. Lyle (1967. A report including analytical conclusions based on the above three volumes of case studies)

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Managing educational costs by Philip H. Coombs and Jacques Hallak
Published by Oxford University Press, New York, London and Toronto, 1972

Quantitative methods of educational planning by Héctor Correa
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The world educational crisis: a systems analysis by Philip H. Coombs
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The book

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The author

Jacques Hallak is a staff member of the International Institute for Educational Planning, Paris. His previous publications include *The analysis of educational costs and expenditure* (1969); he is also co-author of two monographs on the financial aspects of education in certain African countries (1966) and co-author of *Managing educational costs* (1972).

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